

FIFTY-SIXTH  
ANNUAL MEETING  
OF THE  
*American Institute of Instruction.*

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LECTURES, DISCUSSIONS, AND PROCEEDINGS.

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NEWPORT, R. I., JULY 7-10, 1885.

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Published by order of the Board of Directors.

W. B. WRIGHT, *Stenographer.*

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# AMERICAN INSTITUTE OF INSTRUCTION.

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## **Fifty-Sixth Annual Meeting,**

JULY 7, 8, 9, AND 10 1885.

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## **JOURNAL OF PROCEEDINGS.**

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### **FIRST DAY. — JULY 7, EVENING.**

THE fifty-sixth annual meeting of the American Institute of Instruction was called to order at Newport, R. I., on the evening of July 7, President Patterson in the chair.

Rev. Warren Randolph, chairman of the local committee, Mayor Franklin, and Ex-Senator Wm. P. Sheffield welcomed the educators as follows : —

Rev. W. Randolph : —

We have invited you to come, not only to the real birthplace of "liberty and law," but to a town whose people cherish, with an unflinching interest, their early traditions relating to religion and education. Should any of your members, skilled in archæology, unravel for us the mystery which for two hundred and fifty years has hung over the ancient pile of masonry in one of our public parks, he would be judged by our people entitled to rank with the benefactor who deciphered the meaning of the Egyptian hieroglyphics.

The ancient temple is still standing among us in which the idealist, Dean Berkeley, worshipped, before he became the Bishop of

Cloyne. And, if you will give us the time, we will show you the rocks, now called Paradise, whereon he sat studying the virtues of tar-water, and putting into shape the subtile statements of his Minute Philosopher.

Coming still nearer to your line of thinking, as public and practical teachers, I may say that we take especial pride in the fact that here, in Newport, in 1640, two hundred and forty-five years ago, a public school, under the care of one Robert Lenthall, was established; the first public school, it is said, that was established in America, and, as many believe, the first of the kind in the world.

Of the combined attractions of our town, in the old and the new, in the elegant and quaint, in nature and art, it is the province of his Honor the Mayor to speak, in the absence of his Excellency the Governor. The wider welcome given to you by the authorities and citizens of the State, Ex-Senator Sheffield will present.

To our local committee and its indefatigable secretary, Mr. Geo. A. Littlefield, the accomplished superintendent of our public schools, no more congenial work could have been given than making arrangements for your coming to our fair city by the sea; and if your meeting here shall prove to you a pleasant one, and if it shall give such an impetus to the cause of good learning as your meetings have given elsewhere, it will be to us a great joy, and our highest hopes connected with it will be realized.

Mayor Franklin : —

The people of Newport appreciate the honor you have shown them in selecting their beautiful city for your annual gathering. As their representative, I extend to you a hearty welcome, hoping that your exercises and discussions will be profitable, and lead to an increased interest in educational work. It is not expected that you will confine yourselves entirely to labor while among us, consequently, arrangements have been made to show you our city and its places of interest, and thus add to your pleasure. The natural attractions of Newport have rendered her famous as a summer resort, and justly entitle her to be called the "Brighton of America." Here can be found spots of historic interest, for our old town is full of these associations. The Old

Stone Mill stands in yonder park, which is named in memory of one of our public benefactors. His remains are in the quiet city of the dead of which Longfellow has written : —

“ How strange it seems ! These Hebrews in their graves,  
Close by the street of this fair seaport town,  
Silent beside the never-silent waves,  
At rest in all this moving up and down.

Gone are the living, but the dead remain,  
And not neglected ; for a hand unseen,  
Scattering its bounty like a summer rain,  
Still keeps their graves and their remembrance green.”

After allusion to other historic spots he said : These are not all. Time, however, will not allow me to mention others. I again bid you welcome to our beautiful “ City by the Sea,” one of the capitals, and a small part of the great State of Rhode Island, and gladly give way to Senator Sheffield, who will, for his Excellency the Governor, welcome you to the whole State and Providence Plantations.

President Patterson then read a letter from his Excellency Governor Wetmore, expressing regret that important and unexpected business, making it necessary for him to be absent from the city, would deprive him of the pleasure of welcoming the Institute to Rhode Island, and stating that at the last moment Mr. Sheffield had consented to speak for him.

Ex-Senator Wm. P. Sheffield : —

The Governor and Commander-in-chief of Rhode Island, having had laid upon him a very pressing necessity to be absent from the State at this time, has laid upon me his command to appear here in his behalf and in behalf of the State to greet your coming within our narrow borders, which I cheerfully obey, and in the name of the Governor and people of the State, I extend to you, in their behalf, a cordial greeting and

hearty welcome, and express to you the very great satisfaction we feel at having so respectable and so intelligent an association as is yours gathered within our borders.

I cannot help but regard it as a happy augury for the future of your association that you have come here to have your inspirations strengthened in the great work you have in hand, at the birthplace of American free schools. On the last day of February, 1639-40, Robert Lenthall, a learned clergyman, who had been silenced at Weymouth for promulgating the dogma that persons should be admitted to the church only upon the confession of their faith, having wended his way through the intervening forest, arrived on this island, where the discarded minister was allowed to preach, and in the beginning of the following August, in the employment of the municipality, he opened a free public school, for the keeping of which he was paid from the resources of the same municipality. This we claim to have been the first free school organized under municipal control, and supported by public taxation, in America; possibly, the first organized anywhere.

At this delightful season we welcome you to our garden island. Here you will find traces of our old and our new civilization, and also of the era which separates the two. The first period ended with the commencement of the Revolution. The immediate effect of the Revolution upon the prosperity of Newport may be inferred from a declaration of that peerless scholar, long a settled pastor here and afterward a president of Yale College, Ezra Stiles, who, as the war came on, was forced to leave the town; upon his return at its conclusion, to take formal leave of his people, he wrote in his diary, "I judge that about three hundred dwelling-houses have been destroyed in Newport. The town is in ruins, but with Nehemiah, I could prefer the very dust of Zion to the gardens of Persia, and the broken walls of Jerusalem to the palaces of Shushan."

Again I bid you welcome, and trust that your sojourn here will be pleasurable to you and profitable to the great undertaking you have in hand.

#### Response of President Patterson :—

Responding to you, gentlemen, in your respective official relations, you will allow me, in behalf of the American Institute of



Instruction, to thank you for this triple greeting and for your cordial and eloquent words of welcome to your beautiful city. Our errand is one of peace and prosperity, and I deem it an augury of special success that the representatives of the State, the municipality, and of the church should thus recognize and encourage the cause we seek to advance. We are glad to be here, for the place is full of thrilling memories of the past and a fit residence of the genius of meditation, the patron divinity of the schools of learning. Beneath these grand old trees and listening to the voices of the sea, how can we be otherwise than thoughtful, patriotic, and pure? Our association was born in 1830 in the city of Boston, where so many other good things and good people have been born. In the intervening years, we have become a large and, we flatter ourselves, a rather useful family. The children have scattered into various States, but once a year, after the old New England fashion, we come together to talk over what we have done, how we have done it, and what we hope to do in the future. You will find that we are a good-natured folk; and people who can grow old under the conditions and experiences of life, and keep good-natured, are good people. We are a company of schoolmasters and schoolmistresses, but if we had not been abroad numerously, as Artemas Ward would say, the Revolution that ebbed and flowed about this old town in the days of our fathers would have resulted in a social pandemonium, to be followed by a military despotism. Such is the course of revolutions springing from ignorance, as we have seen illustrated in the history of France. Advancing we find that the splendid achievements, the universal comfort, and unparalleled prosperity crowded into our century of national life have descended from the high places of learning and religion. Some people accept the fruitage of the schools as they do the fruitage of the earth, as an outcome of natural laws about which they need have no concern, responsibility, or gratitude. But thoughtful people have learned better, and the civilized world at last is waking up to the necessity and value of popular education and bestirring itself to organize and advance this fundamental interest of government and of peoples.

The progress of the last fifty years, in educational matters, has been as surprising as have been the triumphs in the fields of industrial enterprise. The discoveries in science and the inventions in art within that period have revolutionized the whole

structure and machinery of society. War, agriculture, manufactures, domestic and foreign trade, the conveniences of the poor and the luxuries of the rich as they exist to-day, are a new creation of our modern civilization, and that is an offspring of popular education.

The special efforts of scholars in this age is to bring the profoundest and truest scholarship to the aid of practical life. The learning which the ancients held secluded as a divine emanation too pure for contact with the world, here and now is flowing like a new life-blood through all the industries and institutions of society. Education has made the masses masters of themselves and the world. You, gentlemen, represent the political, social, and moral interests of the State, and the object of our organization is to make broad and secure the foundations on which these rest. We therefore accept your welcome as a God-speed from colaborers in the work of human improvement.

President Patterson here announced that owing to illness, President Robinson, who had been billed to speak, was unable to deliver his address; accordingly he had consented to attempt, not to fill his place, but in the language of Oliver Wendell Holmes, "to rattle round in it." (See first Lecture, entitled "The Sources and Uses of Wealth.")

#### SECOND DAY.—TUESDAY MORNING.

The morning session was opened by prayer by the Rev. Mr. Emerson of the United Congregational Church. After singing by a choir, President Patterson delivered the annual presidential address. (See Lectures.)

Mr. Patterson was followed by Prof. W. H. Payne, who spoke on "The New Education." (See Lectures.)

This subject was further discussed by Mr. John Kneeland, supervisor of schools, Boston, and Mr. John D. Philbrick, ex-superintendent of schools, Boston.



## APPOINTMENT OF COMMITTEES.

The president then announced the following committees:—

*On Nominations.*—William A. Mowry, Massachusetts; Justus Dartt, Vermont; Prof. W. A. Robinson, New Hampshire; George A. Littlefield, Rhode Island; George B. Northrop, Connecticut; Prof. H. P. Warren, New Jersey; W. J. Corthell, Maine.

*On Teachers and Places.*—F. Cogswell, Massachusetts; T. J. Morgan, Rhode Island; L. H. Marvel, Maine; Frederic Kelsey, New Hampshire; D. N. Camp, New Britain, Ct.

*On Necrology.*—Charles Northend, Connecticut; Edward Conant, Vermont; John Kneeland, Massachusetts; Merrick Lyon, Rhode Island; C. C. Rounds, New Hampshire; John D. Philbrick, Massachusetts.

Later, Mr. Northend resigning from the committee, Mr. Merrick Lyon was appointed chairman, and Mr. L. L. Camp selected to fill the vacancy on the committee.

*On Resolutions.*—T. B. Stockwell, Rhode Island; J. F. Blackinton, Massachusetts; M. Grant Daniell, Massachusetts; H. P. Warren, New Jersey; Amos Hadley, New Hampshire.

The morning session concluded with an address on "The Province of Supervision," by Mr. L. H. Marvel, of Lewiston, Me. (See Lectures.)

## AFTERNOON SESSION.

Tuesday afternoon, excursions being in order, the members of the Institute, in large numbers, found their way, by the United States launch "Monroe," by the steamer "Jamestown," and by sail-boats to Fort Adams, to inspect the same and witness a battery drill.

## TUESDAY EVENING.

According to the programme, Prof. C. A. Young, of Princeton, N. J., was to have delivered a lecture upon "The College *versus* the University," but was prevented from attending. In place thereof, Mr. T. W. Bicknell, of Boston (who was to speak Thursday morning), delivered a lecture on "Civil Service Reform applied to Teaching." (See Lectures.)

Following Mr. Bicknell, Mrs. Abba Gould Woolson spoke on "George Eliot and her Heroines." (At the request of Mrs. Woolson, no abstract of this address is published.)

## THIRD DAY. — WEDNESDAY MORNING.

After prayer by Rev. G. J. Magill, of Newport, the Committee on the Bicknell Fund, T. B. Stockwell, secretary, reported that, in accordance with the following recommendation of the Board of Examiners, they had awarded a prize of thirty dollars to General T. J. Morgan, of the State Normal School of Rhode Island, who was found to be the author of the essay under the signature of "Pestalozzi."

The examiners of the prize essays, Messrs. J. Milton Hall, W. A. Robinson, and Mrs. Eva D. Kellogg, had read six essays upon "The True Functions of the Normal School," and they considered the essay signed "Pestalozzi" as the one deserving the prize of thirty dollars. They had also examined one essay upon "The Teacher's Tenure of Office," and recommended that no prize be given for it.

President Patterson then introduced Mr. Frederic

W. Tilton, principal of the Rogers High School, of Newport, who read a paper upon "The Teacher's Duty to his Office and the Community." (See Lectures.)

The paper was discussed by President J. C. Greenough, of Amherst.

Mr. H. M. Willard, principal of the Vermont Academy, Saxton's River. Vt., followed with a paper on "The Education Needed." (See Lectures.)

The subject was discussed by Mr. W. A. Mowry, of Boston, who urged the importance of moral instruction, and the prime necessity of "character-building."

Prof. S. R. Thompson was the next speaker, and read a paper on "Too Much of a Good Thing."

F. F. Barrows, Conn., A. A. Miner, Boston, and Z. Richards, Washington, D. C., participated in the discussion.

#### WEDNESDAY AFTERNOON.

In the afternoon, by the invitation of Capt. W. T. Sampson, commanding the Torpedo Station, the members of the Institute had an opportunity to inspect the interesting processes employed in the government shops under his command, and at 3.30 o'clock fired, experimentally, between the island and the town, one or more torpedoes. Several hundred members availed themselves of the opportunity to witness these interesting exhibitions.

#### WEDNESDAY EVENING.

At the evening session Miss Alice Freeman presented a paper on "Influence of Women's Education in National Character." (See Lectures.)

Col. H. B. Sprague, of the Girls' High School, Boston, followed with an address on "An Educational Party Needed." (See Lectures.)

## FOURTH DAY.—THURSDAY MORNING.

After prayer by Rev. Mr. Hollingshead, of Newport, Prof. Amos Hadley, of Concord, N. H., presented a paper on "Horace Mann." (See Lectures.)

The subject was discussed by Gen. J. Eaton and Mrs. Heath.

"Geometry and its Methods" was the subject of the next paper, by Prof. R. Fletcher, of New Hampshire. (See Lectures.)

Discussed by Gen. J. Eaton.

The morning exercises concluded with a paper on "Evening Schools," by Supt. E. P. Seaver, of Boston.

Discussed by Mr. E. C. Carrigan, of Boston.

President Patterson here introduced Governor Wetmore, of Rhode Island, who spoke substantially as follows:—

I am glad to have an opportunity, even at so late a moment of your session, to express my great regret at not being able to be here on Monday evening, at the opening of the Institute, and to have added a few words to those spoken by Dr. Randolph and his Honor Mayor Franklin, to express my warm interest in the Institute; but my friend, Senator Sheffield, at the last moment, undertook to speak to you, and I have no doubt that all present at the meeting were far more gratified at the substitution. I have nothing further to add, save to reiterate my warm interest in such gatherings as these.

## THURSDAY AFTERNOON.

The afternoon sessions were varied by an excursion to the U. S. ship "New Hampshire." Launches conveyed the members to the ship, where there were exhibitions in gun-squad drill, seamanship, boat practice, and general lessons. After a thorough inspection of

the vessel, the visitors went to Harbor Island, where there was a battalion drill and dress parade by the marines, blue jackets, and apprentices. The excursion was a most successful one, and all expressed their thanks to Captain Yates, U. S. N., and his officers.

#### THURSDAY EVENING.

*Nomination of Officers.*—W. A. Robinson, of Franklin Falls, N. H., from the Committee on Nominations, reported as follows:—

The Committee on Nominations beg leave to report that they have given diligent attention to the subject committed to them, and unanimously recommend the following list of officers for the year ensuing:—

*President.*—J. W. Patterson, New Hampshire.

*Vice-Presidents.*—Henry Barnard, Hartford, Conn.; Henry K. Oliver, Salem, Mass.; Ariel Parish, Denver, Col.; John D. Philbrick, Boston, Mass.; Hiram Orcutt, Boston, Mass.; Charles Northend, New Britain, Conn.; Merrick Lyon, Providence, R. I.; Thomas W. Bicknell, Boston, Mass.; C. C. Rounds, Plymouth, N. H.; A. P. Stone, Springfield, Mass.; John Eaton, Washington, D. C.; B. G. Northrop, Clinton, Conn.; T. B. Stockwell, Providence, R. I.; D. N. Camp, New Britain, Conn.; J. W. Dickinson, Boston, Mass.; D. W. Jones, Roxbury, Mass.; D. B. Hagar, Salem, Mass.; A. G. Boyden, Bridgewater, Mass.; E. A. Hubbard, Hatfield, Mass.; J. H. Hanson, Waterville, Me.; M. H. Buckham, Burlington, Vt.; J. L. M. Curry, Richmond, Va.; A. D. Mayo, Boston, Mass.; Edward Conant, Castleton, Vt.; Sarah E. Doyle, Providence, R. I.; Celeste E. Bush, Farmville, Va.; W. J. Corthell, Gorham, Me.; Augustus Morse, Hartford, Conn.; Albert Harkness, Providence, R. I.; Chas. P. Rugg, New Bedford, Mass.; H. F. Harrington, New Bedford, Mass.; W. E. Eaton, Charlestown, Mass.; H. F. Fuller, Worcester, Mass.; Edwin P. Seaver, Boston, Mass.; D. W. Hoyt, Providence, R. I.; W. T. Harris, Concord, Mass.; W. E. Sheldon, Boston, Mass.; Geo. H. Martin, Bridgewater, Mass.; J. M. Sawin, Providence,



R. I.; H. W. Willard, Saxton's River, Vt.; W. T. Peck, Providence, R. I.; Justus Dartt, Montpelier, Vt.; John T. Prince, Waltham, Mass.; H. C. Harden, Boston, Mass.; R. Woodbury, Castine, Me.; F. F. Barrows, Hartford, Conn.; L. W. Russell, Providence, R. I.; F. D. Blakeslee, E. Greenwich, R. I.; E. S. Ball, Westerly, R. I.; Ellen Hyde, Framingham, Mass.; Judah Dana, Castleton, Vt.; J. G. Scott, Westfield, Mass.; A. W. Edson, Attleboro', Mass.; Elbridge Smith, Dorchester, Mass.; J. D. Bartley, Bridgeport, Conn.; H. M. Harrington, Bridgeport, Conn.; J. F. Blackinton, Boston, Mass.; H. E. Sawyer, Northfield, Mass.; E. H. Howard, Providence, R. I.; I. N. Carleton, Bradford, Mass.; Larkin Dunton, Boston, Mass.; Geo. A. Littlefield, Newport, R. I.; G. T. Fletcher, Marlboro', Mass.; James A. Page, Boston, Mass.; A. D. Small, Allston, Mass.; T. J. Morgan, Providence, R. I.; Richard L. Pease, Edgartown, Mass.; Alvin F. Pease, Pawtucket, R. I.; J. C. Greenough, Amherst, Mass.; L. L. Camp, New Haven, Conn.; Amos Hadley, Concord, N. H.; W. W. Waterman, Taunton, Mass.; E. H. Davis, Chelsea, Mass.; Susan M. Cate, Boston, Mass.; Alice E. Freeman, Wellesley, Mass.; Wm. Crockett, Frederickton, N. B.; Mrs. Abba Gould Woolson, Concord, N. H.; Sarah J. Baker, Boston, Mass.; Edwin C. Hewett, Normal, Ill.; Irwin Shepard, Winona, Minn.; A. Allen Stanton, Norton, Mass.; Lucretta Crocker, Boston, Mass.; Principal Hall, Hinsdale, N. H.; J. Kelsey, Nashua, N. H.; J. M. Hitt, Northfield, Vt.; Channing Fulsom, Dover, N. H.; C. D. Hine, Hartford, Conn.; W. A. Robinson, Franklin Falls, N. H.; Principal Carroll, New Britain, Conn.; Principal Graves, Hartford, Conn.; H. S. Tarbell, Providence, R. I.; W. I. Twitchell, Hartford, Conn.; H. P. Warren, Lawrenceville, N. J.; N. L. Bishop, Norwich, Conn.; Samuel W. Mason, Boston, Mass.; William H. Wilson, Providence, R. I.; C. Goodwin Clarke, South Boston, Mass.; John Tetlow, Boston, Mass.; A. D. Gray, Springfield, Mass.; L. R. Williston, Boston, Mass.; A. L. Jordan, Lewiston, Me.; L. H. Marvel, Lewiston, Me.; Thomas Tash, Portland, Me.; E. E. Files, Augusta, Me.; Jere. M. Hill, Bangor, Me.; E. H. Sampson, Saco, Me.; Mary E. Hughes, Castine, Me.

*Secretary.* — George E. Church, Providence, R. I.

*Asst. Secretary.* — Ray Greene Huling, Fitchburg, Mass.

*Treasurer.* — James W. Webster, Malden, Mass.

*Asst. Treasurer.* — J. Milton Hall, Providence, R. I.

*Councillors.*—Hmoer B. Sprague, Boston, Mass.; William A. Mowry, Boston, Mass.; M. G. Daniell, Boston, Mass.; A. J. Manchester, Providence, R. I.; James S. Barrell, Cambridge, Mass.; William H. Lambert, Boston, Mass.; Francis Coggsell, Cambridge, Mass.; George A. Walton, West Newton, Mass.; B. F. Tweed, Charlestown, Mass.; A. P. Marble, Worcester, Mass.; E. H. Ruggles, Hanover, N. H.; Frank A. Hill, Chelsea, Mass.; J. G. Edgerly, Fitchburg, Mass.; John Kneeland, Boston, Mass.

The nominations were unanimously approved.

The Committee on Resolutions reported through J. R. Blackinton, of Boston, the following resolutions:—

*Resolved,* That as the teaching service demands the best talent and the largest acquisitions for the accomplishment of its work, the teacher should be protected by such a system of examination under competent examiners as to insure, after a proper probation, permanency of position during the period-of effective service.

*Resolved,* That we desire to express our conviction of the importance of instructing the children and youth of our land more fully as to the nature of stimulants and narcotics, and their effects upon the human system, and that we approve of the laws providing for the introduction of the study of physiology and hygiene with special reference to those subjects into our schools.

*Resolved,* That, in view of the failure of the present provision of our cities and large towns to meet the educational needs of the whole people, evening schools should be established by law and made a constituent part of our system of education.

*Resolved,* That the National Bureau of Education has proved itself an efficient and valuable source of educational power, and by its faithful and wise management under the present Commissioner of Education, Gen. John Eaton, LL. D., it has commended itself and him to the entire confidence and cordial support of the entire country, and that we commend this agency to the liberal support of Congress.

*Resolved,* That the thanks of the Institute are heartily tendered to the different bands that have discoursed most excellent music at the several sessions; to the choir, who have added so much to

the devotional exercises; to Col. C. L. Best, for the highly instructive and entertaining military display at Fort Adams; to Capt. W. T. Sampson for his interesting exhibit of the methods of torpedo warfare; to Capt. A. R. Yates for the opportunity to witness the manual and drill of the excellent system of training given the United States apprentices on the school ship "New Hampshire"; to the governors of the Casino for their graceful courtesy; to the city government of Newport and her hospitable citizens for their cordial reception and delightful entertainment; to the various railroads, steamboat companies, and hotels, for reduced rates and other favors; to the Old Colony Railroad and Steamboat Company for a delightful ocean excursion; to the reporters of the daily press; and to all who have any way contributed to our comfort and welfare.

*Resolved*, That we especially desire to recognize the services of the local committee, and their efficient secretary, Geo. A. Littlefield, Esq., for the perfection of their arrangements, and their attention to every detail, whereby the remarkable success of this meeting has been assured.

The resolutions were unanimously adopted.

The Committee on Necrology then rendered its report through Mr. Charles Northend, of New Britain. (See p. 299.)

Dr. Randolph here addressed the meeting and said that the local committee had called on Hon. George Bancroft to invite him to attend the meeting this evening. But care for his health, now in his advanced age of eighty-five, compelled him to refuse, so that he may keep on in his work, — such work as the world knows. Mr. Bancroft, the speaker said, expressed enthusiasm for the teacher's calling, with which he had been associated in early life, and he will watch with interest whatever plans we shall draw up for the future progress of education.

Mr. G. A. Walton moved that a committee be



instructed to draft a resolution of sympathy with Gen. Grant. The motion was carried unanimously.

President Patterson here read a telegram of congratulation from the New York State Teachers' Association then in session at Saratoga, wishing the Institute an enthusiastic and profitable session.

Gen. J. Eaton, United States Commissioner of Education, being then introduced, spoke as follows. —

I understand it is the wish of the officers, in view of the fact that the hope that President Cleveland and Miss Cleveland might be here on this occasion has been disappointed, that I should make a statement. It is this: Your secretary of the local committee was in Washington, and went to the President personally and was received kindly, and introduced to the Secretary of the Interior, Mr. Lamar, who at the moment was ready to assure him if his public duties would permit, he would be present on this occasion. Later, when the formal invitations of the officers of the Institute and your honorable Mayor and local committee were presented to the President, he received them very kindly and appreciatively, remarking especially on the fact that your committee had been so considerate as to offer him some relief and rest by assuring him he would be at his own command while here, but the public duties were such an enormous demand on his time that it was impossible then to leave Washington, and it has since proved impossible for him to leave. Miss Cleveland also expressed her very deep interest in the occasion, was very grateful for the invitation, but had slight hopes that she would be able to leave Washington at that date; and it has proved beyond her control to do so, for she is not here.

Now, Mr. President, ladies and gentlemen, if I may be permitted to say a single word slightly personal perhaps to myself, I individually wish to return to you my most sincere and heartfelt thanks for the resolution and recognition of the services of the Bureau of Education. May I say, my friends, if I have done anything toward the result that you commend, you and the other educators of the country have done the rest. This is a simple statement of the bald fact. I have trembled at the responsibility

of that office again and again. I remember the sleepless nights when I made up my mind that there must be an annual report of education in the United States. The States could not put their data in shape to be prepared; Dr. Barnard could not publish what he did get; the cities could not put their data in shape, for they could not command comparison beyond a limited number, and yet my conviction — which was enforced by one of those remarkable letters from Dr. Sears — was that there must be an annual report. There was no money to pay for it, and how could such a collection of data be made? It could be made if the teachers, the educators of the country, would make it, and I resolved to do what little the office allowed me to do towards that end; and while I have felt keenly the imperfections step by step, — no one knowing them or feeling them more keenly, — I have had a great many things to assure me of the value of the result. I will tell you one instance on the point of statistics. When I was in Berlin after a few years' experience in the office, conscious of our imperfections, I went into the office of the great statistician in charge of the statistical office of that government. He spoke English readily, and while we chatted he rang his bell and sent for the report of education of the United States, and taking up the volume he placed the statistical portion between his hands and said to me, "My dear sir, do not be troubled about the value of those statistics. This has been my life work, and I tell you, my dear sir, that although they are imperfect as you say, and although we in this government have absolute authority to collect every data we desire, and although this is true of the other nations of Europe, there is no nation under heaven, up to this date, that has been able to give in so satisfactory shape the statistics of its education." My friends, the result is due to you, to the educators of the country, who have felt the necessity of these data for comparison. I thank you for forwarding them, and I ask for your continued co-operation.

President Noah Porter, of Yale College, was here introduced, and delivered an address on "Should Greek be wholly Optional in the College Course?" (See Lectures.)

Rev. A. A. Miner, D. D., of Boston, offered the following resolutions:—

*Resolved*, That in the opinion of the Institute, the Congress of the United States cannot render a more important service to the cause of education than to aid by liberal appropriations in the removal of the alarming illiteracy of the country indicated by the fact that more than six millions of our population over ten years of age are unable to write even their own names, and yet many of these bear the responsibility of government in their hands.

*Resolved*, That the secretary of the Institute transmit a copy of the resolutions to the Speaker of the House and the Speakers of the several Assemblies.

The resolutions were seconded by E. C. Carrigan, of Boston, and were unanimously adopted.

Mr. Blackinton, from the Committee on Resolutions, reported the following, amidst an almost painful silence:—

*Resolved*, That the fourteen hundred members of the American Institute of Instruction, at the closing session, held at Newport on this ninth day of July, 1885, recognizing the eminent services civil and military, of our beloved friend and the friend of every American, Ex-President Grant, and profoundly touched by his patient endurance of, and heroic struggle with, pain and suffering desire to express their heartfelt sympathy with him and with his family in their hour of painful anxiety, and their earnest hope that by a merciful Providence his days on earth may be prolonged.

The meeting of the Institute was brought to a close by the singing of "America."



LECTURES AND ADDRESSES

DELIVERED BEFORE THE

American Institute of Instruction,

JULY, 1885.



# I.

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## WEALTH.

BY HON. J. W. PATTERSON, LL. D., CONCORD, N. H.

A RECORD of antagonism between the rich and the poor may be traced through all the centuries of progress to the dawn of civilization. At times it is limited to a vigorous rivalry of interests, and at others it deepens to a violent and bloody conflict of classes, as in the historic struggles of the plebeians and patricians, and the bitter and deadly socialistic plots which have marred the civil records of modern times. The manifestations of this spirit have become so frequent and threatening in our own country as to have alarmed thoughtful men, and driven them back to the study of the elements of the organic life of society.

Topsy, the unique offspring of the genius of Mrs. Stowe, insisted that she was not born but "grewed"; and we, who have nothing but our identity which we can claim by birth, are amused at the saying as a false and ludicrous expression of facts. But the philosophy of Topsy, the undeveloped representative of an advancing race, are sound; it is emphatically true of our social condition.

Whatever we have and whatever we are above the level of barbarism are a matter of growth. This evening we are to discuss the source and function of wealth; and it is only necessary to recall briefly, rec-



ognized facts of history, to show that the law of development applies with peculiar force to public and private accumulations. Napoleon the Great, on reading Say's work on "The Production, Distribution, and Consumption of Wealth," said, "Formerly there was only one kind of property, land; another has since arisen, industry." Doubtless the great captain meant by this terse generalization, that land was the source of the raw material, the crude beginnings of wealth, but that labor must direct the forces and mould the materials of nature in order to secure what, in an advanced civilization, is accepted as wealth. The genius that solved military problems with an unerring instinct, unfolded with equal ease and originality the subtlest and profoundest questions of social and political science. With marvellous insight, his superlative intellect recognized at a glance the identity of wealth and labor, and in a single laconic sentence expressed the pregnant principle of the whole philosophy of political economy.

Labor is unaccumulated wealth, and wealth is labor crystallized into material forms. The savage on the mountains and the prairies feeds upon wild berries or game taken in the hunt; and the uncivilized man, upon the sea-shore or the river's bank, supplies his daily want from the water. But necessity or instinct soon teaches them to make provision for the future wants of themselves and those dependent upon them. Then, for the first time, begins the accumulation of surplus earnings, and, to increase the power of accumulation, the faculties are stimulated into invention. Wild animals are domesticated, and the soil is made to yield a richer and more abundant supply to artificial wants. A bow and arrow or a rude boat from the trunk of a



fallen tree are initial products of this awakened ingenuity. These, by a process of evolution, in the course of centuries, develop into the artistic and deadly rifle, which now settles the fate of empires, and the white-winged fleets and splendid steamships of our latest civilization, which, moving under their pillar of cloud by day and pillar of fire by night, effect the vast exchanges of an ever-increasing commerce. The clumsy carriage, devised to facilitate the intercourse and simple barter of adjacent tribes, by successive stages becomes the groaning wain, the chariot of war, the royal coach, and the gorgeous rail-car, surpassing in beauty a palace of the early kings, and rivalling the winds in speed. The robe of skins, which at the beginning ministered to personal comfort, gives place at first to a textile of grass or bark; but the cunning fabrics of the East and the richer stuffs of our Western art gratify the awakened pride of succeeding generations. The spinning-wheel and hand-loom of our grandmothers, which broke the stillness of private homes, is followed by the thundering machinery of long streets of massive factories driven by the tireless force of steam or water.

Thus the birth and growth of agriculture, manufactures, and commerce sprang from the desire of gain. Production was quickened by the extent and rapidity of exchange, and exchange was fed by increased production.

The forces that were active in the infancy of social progress are efficient still. As the power of accumulation increases with the agents and facilities of production and exchange, and so feeds and intensifies the hunger of gain, the desire becomes a powerful and impelling motive to invention and enterprise. Railroads,

steamships, telegraphs, and telephones are employed because they open new and distant markets and quicken trade. Machinery is employed to enhance or relieve human industry, because it enables us to master and utilize the supreme and tireless forces of nature, and so increase thrift and multiply comforts and luxuries. Thus all the great departments of organized society are interdependent. Each is offspring and parent of all the rest.

But without accumulation there could be no investments in improvements and facilities of business, or in the comforts of life, and we should remain at the level of barbarism. Even the rude implements of an age of stone required capital, but foundries, factories, steamships, railroads, and the vast and complicated appurtenances of our modern civilization demand the investment of millions; often the combined accumulations of scores of years and of men. Cities, states, and empires rest upon wealth and could not exist without it. The lucrative industries, the schools of learning, organized society, and the very church itself, would perish but for the surplus revenues of labor, against which labor is often marshalled in unnatural conflict. Workingmen have a more immediate and vital interest in the accumulation of wealth than the rich. It is invested capital that creates a demand for labor, and lifts the masses from deprivation and servitude, and makes them builders of civilized states and masters of all social activities and enterprises.

Labor and capital being interchangeable forms of one substance, each has the same right as the other to organize for its own protection in all legitimate ways; but when they resort to violent and destructive meas-

ures, they subvert their mutual interests and repeat the fabled folly of the one who killed the goose that laid the golden egg.

But there could be no accumulations without the recognition in law and the enforcement of the right of property; for without these there could be no motive to industry, frugality, or thrift. This necessitates the creation of governments, courts, and military force, for the right and the power to legislate and to enforce the law at home and abroad are essential to the existence of society

But the binding force of law is the perception of an intelligent and supreme will back of and above the law, to which we are responsible. The organism of society demands a supreme Being, whose will is paramount in human affairs. An unchanging principle of right, that has its source in infinite wisdom, must be the strength of law, or it has no divine sanction, and is only a system of rules originating in human prudence; and right and wrong, innocence and crime, are artificial distinctions which cannot long command respect or obedience. The laws which secure the rights of property do and must rest upon a general consciousness of their intrinsic justice. The man who robs me on the highway or filches my treasures, and he who, by misrepresentation or craft, gets possession of what is mine, without an exchange of equivalent values, violates my right of property, and secures none to himself which the law will allow. The element of wrong in such transactions is clear and unquestionable. But the man who takes advantage of my ignorance or necessities to overreach me in business and secure more than the prevailing market rates, though he may not be liable in the courts

of justice, has also violated the right of property, and done more to corrupt and madden the currents of trade than the thief or the highwayman. Selfishness has involved the multifarious enterprises of business in a web of casuistry so subtle and confusing that honest minds find it difficult to trace the line of right, when otherwise it would appear clear and certain.

Wealth, taking advantage of this obscurity, has sometimes, with or without the protection of law, laid upon the poor unendurable burdens, and so violated the rights of humanity as to aggravate the old conflict between labor and capital, and brought upon itself those terrible revenges which have stained and dishonored the records of civil life. It is not strange that a ragged, ignorant Irish peasant, slaving to feed his hungry children upon an acreage that was wrenched from his fathers by the hand of violence, and maddened into hate by the hopelessness of his lot, should confound the right of revolution, springing from patriotism and humanity, with personal retaliation, which is unavailing and criminal.

The influence and results of a clear and efficient legal protection of property are most impressive as seen in historic examples. Egypt, Asia Minor, and Greece, when at different periods they were under the control of strong and responsible governments, which protected the rights of the people, were the seats of mighty and prosperous empires, studded with magnificent cities, which were adorned with the splendors of wealth and art, and poured from their massive gates invincible armies of proud and stalwart men. But when the reign of law gave place to political weakness and vacillation, the disintegration of civil power began; popular enterprise and ambition perished, and a nerveless, thriftless

posterity starved in the homes of the masters of the world.

During all the centuries in which the civil law secured personal rights to the citizens of Rome, unparalleled prosperity was enjoyed throughout the extended provinces of the imperial domains. The conquerors of the world turned with characteristic energy to agriculture, manufactures, and commerce, and created wealth with the same rapidity and ease with which they had extended their jurisdiction throughout the civilized world. Temples and palaces of unequalled beauty and richness were set like jewels in the mighty girdle of the Mediterranean. Cities, thronged by a prosperous and happy people, sprang into existence in all parts of the vast empire. Theatres and amphitheatres were erected at incredible expense for the amusement of the masses. The island of Rhodes erected 23,000 statues, many of them works of unsurpassed genius. A double colonnade, four miles in length, adorned a street of Antioch; Alexandria boasted of a library of 700,000 volumes; the city of Rome had 17,000 palaces, 9,000 baths, magnificent triumphal arches, monumental pillars, and costly fountains, and the gilding on her capitol cost an amount equal to fifteen millions of our money. Priceless statues and paintings adorned the dwellings, and ornaments of gold, ivory, and precious stones the persons of the rich. But when, under Commodus and his successors, the government no longer protected the accumulations of industry and skill, the character of the people degenerated, power faded away, and the empire was broken into feeble and discordant fragments.

But as lapse of time operates to weaken the force and application of historic examples, the position as-



sumed may be illustrated with even greater force by the record of England, as it is more familiar in our knowledge. The security given to labor and its accumulations by the common and statute laws of Great Britain has advanced the barbarous clans that fell before the legions of Cæsar to the primacy of nations in wealth and power, and given to the insular kingdom a history grander and more honorable even than that of Rome. English capital has made possible half the improvements of our modern civilization, and its annihilation would deplete the life-blood of the industry and enterprise of the age.

Without the maintenance of the right of property, there can be no development of resources, no advancement of civilization, no mental or moral growth. We may obtain an approximate appreciation of the influence of accumulated wealth in determining the condition and destiny of mankind by tracing its power in a single direction. It is estimated that one ton of coal has the working power of 1,500 men. Thirty years ago, Ralph Waldo Emerson said, "The power of machinery in Great Britain in mills has been computed to be equal to 600,000,000 men; one man being able, by the aid of steam, to do the work which required two hundred and fifty men to accomplish fifty years ago."

In 1871, Dr. Elder affirmed that steam had given to England and America six times their natural working power, and that, by the help of this agent, they were doing twice the work which the whole population of the globe could do without it. That was fifteen years ago, more than "a cycle of Cathay."

The natural agents which machinery has forced into the employments and uses of life since then has ad-

vanced inconceivably both the producing and æsthetic power of the industrial arts, so that the burden of toil has been lifted from the poor, and their homes gladdened with things of beauty. But without the accumulations of the surpluses of labor there could be no investments in machinery, and no utilizing of the tireless forces which have imparted a miraculous power to production and destroyed the limitations of time and space; which have lifted the masses from deprivation to luxury, from slavery to freedom, from ignorance to intellectual enlightenment and power.

But the office of wealth is not limited to a supply of objects and instruments of material advancements. Its influence turns inward upon the soul, and lifts into power those subtile spiritual faculties that are the sources of civilization.

The quickening and development of mental power both lead and follow the progress of material improvement. The unfolding of civilization is simply the projecting of the inner life of man upon the canvas of time, the fixing in visible and palpable forms of the ideas and conceptions of invisible and impalpable mind. Philosophy and science, art and material progress, are crystallizations of thought. The superlative character of Greek architecture and literature measured the superiority of Greek culture.

We cannot limit our practical philosophy to objects of sense, for intellectual products have a marketable value, and enter the domain of political economy. The price of a steam engine or telephone, a statue by Canova, or a painting by Raphael, is far greater than the cost of the simple materials and labor which enter into them.

We pay for the genius of invention and the lofty creations of supreme intellect. Grace, beauty, and utility are costly qualities which mental discipline imparts to the results of industry.

But this subjective power is developed by a profound study of those objects in which thought has found its highest expression. Intellectual faculty is evolved by the reaction of the material world and by the reciprocal influence of the activities of life. Intelligence is the directive agent in the accumulating and investing processes of society, but mind may be quickened into activity, and its discipline secured by the pursuits to which we are impelled by the instinctive desire of gain. The world is largely indebted to the educated classes for the manifold discoveries and inventions which distinguish our age ; but the educating industries, not less than schools and universities, rest upon accumulated capital, and could have no existence without it. The vast framework of social and political institutions, and all the instrumentalities and functions of the mighty organism of the state, have their birth and success in the savings of labor. Even our religious associations and moral enterprises are sustained by money, the love of which is the root of all evil.

But there may be a creation and accumulation of wealth, and no improvement in the condition and character of the people. The slave, the serf, and the peasant may be the creators of wealth, and derive little or no advantage from its increase. Civil institutions organized in the interest of the few, violate the common right of property and defeat the very end for which governments should exist.

An equitable distribution of the profits of production



between capital and labor is demanded by justice as a right of property, and is essential to the general improvement and elevation of society.

The diffusion of wealth moderates the demands of, and imparts a conservative tendency to the masses, as it increases the number who have interests to be protected against the rapacity of selfish and irresponsible power, and the blindness of unscrupulous reformers and revolutionists. Such distribution provides also for the common comfort and for the small investments of the laboring class, in houses, tools, machinery, and working capital; and this is essential to the peace and prosperity of society.

On the other hand, the massing of wealth by personal accumulations, or by company combinations, is indispensable to material and social progress. Otherwise the gigantic cost of the vast schemes of public and private enterprise, which are the distinguishing feature of the age, could not be met, and progress would be arrested. Hence the individual or the association that would strike down capital by violence, or by legal enactments would prevent its natural and reasonable accumulation, wars upon the public welfare, and would destroy the mighty enginery which is lifting from the children of toil the wear and degradation of over-work; which is supplanting popular ignorance by intelligence, giving to the poor the fruitage of all climes, the improvements of all ages, and carrying the tidings of a higher and purer life to the ends of the world.

The rapid elevation of society in modern times is consequent upon the employment of new forces, improved methods of production, and increased facilities of intercourse, and all these are made possible by capital.

Unexchangeable accumulations are not property. Exchangeability is the basis of property, for only by trade, foreign or domestic, can products become useful, and utility is the measure of value. But the rapidity and extent of exchange determine the rate of accumulations, as demand and supply are reciprocal, and demand increases or declines with our markets.

Thus the advancement of mankind by means of the complex and articulated machinery of civilized society is seen to be dependent upon the surplus accumulations of labor. The communistic spirit, if pushed to its logical results, would reverse the movement of civilization, would obliterate the splendid fruitage of progress, would unschool the popular intellect, and bring back the squalor, misery, and hopelessness of primitive savagery.

We do not advocate and would not palliate the diabolical selfishness of unscrupulous wealth, which has sometimes played the tyrant and claimed rights repudiated alike by natural and divine law. But we would restrain the blind violence of partisan rage which would subvert the principles of social order upon whose operation depends the advancement of all classes. The rights of humanity limit but do not destroy the rights of property.

When men are baffled by the extortions of power, or emasculated by the vacillations of a weak, pusillanimous, or unprincipled government, they sink into indifference or despair; popular ambition and enterprise perish; the native force and vigor of the state slumber, and progress stagnates in a sullen inaction, broken only at intervals by spasms of revolution. Such is the fate which for centuries has brooded over the empires

of the East that were the cradles of civilization. Contrast with this the resistless energy and splendid achievements of nations protected by the majestic sway of impartial law. Inspired and sustained by the desire to rise, they spring forward as if impelled by an unseen but elemental force. In the quest of gain, they brave disease and danger, penetrate the frozen zones and burning tropics, ransack the disembowelled earth, and turn the resistless forces of nature into slaves of profit. At the bidding of this spirit mountains fall, seas are bridged, science reveals new resources, and the impossible is made easy.

Instructed by such facts, we may palliate the impatience and excesses of classes hedged in by monopolies and defeated by arbitrary power; but there is no reasonable pretext for intrigues and social conflicts here, where the paths of success are open, and unobstructed by laws or customs, and where the largest emoluments and the highest honors are prizes to which all may aspire. Our laws of entail are in the line of brains, not blood, and the child of poverty may here become the master of millions, and rival princes in the splendor of his equipage. The conflicts of capital and labor in a republic are like the senseless feuds of the old Scotch clans—a system of impoverishment and mutual destruction. It is the glory of our country that the grandson of him who eats bread in the sweat of his brow, may rival the wealth of Croesus, and that the possessor of millions must moderate his pretensions by the reflection that his children may return to the ranks of labor. Industry and frugality are the conditions of thrift and power.

The deductions of theory on this subject are confirmed by the logic of history.

Contrast the miserable condition of England during the reign of Elizabeth, as given by Hallam, with her affluence and prosperity to day. The comfortless huts in which the people then suffered, have given place to the elegant and happy homes of the middle classes of the empire of Victoria. The dark and dreary castles of the old barons, destitute of conveniences and adornment, have been followed by the magnificent palaces of the nobles and merchant princes whose culture and taste are gratified by beautiful furniture, costly libraries, exquisite paintings, and whatever else advanced science and the purest art can supply. Her resources, springing like the dawn from the sea, have outstripped the spread of her jurisdiction, and islands and continents, thrilled with unwonted vitality by her investments, have poured back a golden tribute into her overflowing lap. The rough, unmusical language of her early statesmen, scholars, and poets, in its later attainments, embodies the grandest oratory, the richest literature, and the loftiest songs of any age or people.

But the power of protected capital to stimulate industry and enterprise and to advance the general welfare is most marked here, where all have had a fair field and an equal chance. The past furnishes no parallel to this Republic in the growth of material prosperity and political power. In a century of national life we advanced from three to fifty millions of people; the public domain extended to three times its original limits; the Union increased from thirteen to thirty-eight States, the new vastly surpassing the old in resources, capabilities, and political power; and general destitution gave place to universal prosperity. We conducted four wars to a successful issue, and deducting all liabilities, had a

balance of \$40,000,000,000 of national wealth. At the close of the Revolution our agriculture scarcely met home consumption, domestic trade was slow and scanty, manufactures had nearly perished, and our commerce had been driven from the seas. By the last census the aggregate value of our agricultural products was \$2,213,402,564; manufactures, \$5,369,579,191; foreign commerce, \$1,503,593,404; and our domestic trade, though its statistics are not definitely given, is estimated to be many times greater than our commerce with all foreign nations.

In fifty years we covered the Union with a network of one hundred thousand miles of railroad, and in thirty years created an oil industry of \$335,000,000. These are statistical illustrations of a vast body of national achievements, the *res gestæ* of a free people among whom active and capitalized labor have co-operated for the general improvement.

But in subjective results our record is even more brilliant. The untrammelled freedom, security, and success here secured to personal endeavor, have developed an original and marked type of character. In versatility and force, in aptness to invent and utilize machinery, in variety and grandeur of projected enterprises, in skill and courage of execution, in self-reliance and tenacity of purpose, in general intelligence and quickness of apprehension, history furnishes no rival.

But we have only begun to develop the resources, material and moral, which have been placed at our control. Shall this splendid career, promising so much to mankind, be arrested by agrarian madness, driven to our shores by the police of Europe? Shall visionary doctrinaires who would corrupt the sources of public



opinion, and social barbarians who would upturn the foundations of social order and break down the defences of civil liberty, be allowed, in this land of schools and churches, to kindle class discontent and inaugurate a reign of violence and blood, that they may drift into prominence on the waves of popular passion, and fatten on the spoils of legalized robbery? The richest fruitage of civilization and the best results of civil progress must not be wrecked by a fraternity of unprincipled dreamers and demagogues.

When I reflect upon the extent of our country, the nature of its institutions, and the magnificence of its possible history; when I attempt to calculate the values which human industry may impress upon the raw material now "without form and void" in our mountains and valleys; when I conceive the possible forms which the genius of art may give to the neglected things that lie in our path; when I consider that the power which runs to waste in our streams or sleeps beneath our soil might all be utilized in the interests of humanity; when I measure by the work of some gifted soul the power of thought and imagination that perish in mute oblivion in the unschooled millions; when I recall the wasted passions that burn out and leave no trace of good, — I am profoundly impressed with the greatness and responsibility of the work which has been committed to us as a people.

In the economy of life it is the function of mind to organize and direct social and natural forces, and to give to dead matter forms of utility and beauty. This is eminently true in the historic development of nations, and this development takes its character and success from the prevalent intellectual and moral quality of the



people, and especially of those who educate and mould public opinion. Art, philosophy, and literature were spontaneous products of Greek culture; while the genius of Rome found its natural expression in law, government, and war.

When we compare the extent and resources of our continental Republic with those of the governments of ancient or modern times which have made the deepest impress upon the world; when we contrast the superior general knowledge and executive ability of our people, and the increased facilities and forces now in use, with those of former generations, we can but look to the future with mingled hopes and fears, as our seeming destiny, which otherwise must be grand and noble without a parallel, may be blasted by national folly and vice.

The prophetic vision of the most gifted must fail to discern the influence and mastery that will be wielded by a free, educated, united, and virtuous people devoting their thought and energy to the realization of the possibilities of wealth and power in a country like ours, when a period equal to that in which England and Germany have risen to their culmination shall have passed into American history.

But this bright vision of national glory and happiness may be marred or delayed in its realization by a miserable conflict of interests which in the end will defeat their own intent.

Labor and its accumulations co-operate in the creation of values, and each is entitled to a *pro rata* division of the profits of production. The directive faculty, which is often the leading factor in production, we include in the department of labor.

In industrial as in political affairs there should be no

taxation without representation. This is the teaching of natural law and universal experience. The permanent peace and prosperity of society demand it.

If the injustice and violence which have cursed the social experience of the Old World, in all its centuries of history, are repeated here,

"Where science, art, and labor have outpoured  
Their myriad horns of plenty at our feet,"

we shall deserve the doom of those who learn nothing from the admonitions of the past.

But general intelligence is indispensable to an equality of industrial as of political rights. The ignorant, in spite of protestations or law, will be overreached and subordinated. When the laborer and the capitalist shall equally understand the laws of business, and be equally informed as to the part which each agent contributes to production, will there be a distribution of profits satisfactory to both, and not till then.

Social disturbance and blind uprisings against real or imagined wrongs will effect no extended or permanent cure of social evils. Knowledge is the source of popular rights. When, and only when, the disputes between the estates of labor and capital shall be adjudicated in a court of arbitration, will it generally be recognized that their rights are identical, and that they who engender strife between them are enemies to their country.

## II.

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### PRESIDENT'S ADDRESS.

BY HON. J. W. PATTERSON, LL. D., OF NEW HAMPSHIRE.

ONCE more we of the guild of teachers, from the lowest to the highest grade, have assembled from school-room, academic shade, and college hall, to this ancient and beautiful retreat by the sea, to celebrate, by appropriate exercises of speech and song, the annual festival of our venerable association. We are here to strengthen the bonds of professional union, to enkindle the spirit of improvement, to reanimate lofty purposes, and to deepen our enthusiasm at the sources of inspiration. Here present I see the young, glowing with unchilled ambition for future achievements; the middle-aged, strong, steady, and true to duty; and the venerated fathers of the Institute, laden with honors as with years. One and all, I salute you, and bid you welcome to this reunion of scholars. The place in which we meet links us by historic memories with the past; but our profession brings us into union with the unrealized yet to be. It is our exalted function to reproduce the past in truer and nobler forms in the future, as the generations advance to the inheritance provided in the consummation of human history. One by one we shall fall on sleep and be gathered to our rest; but while we linger, let us so labor that the estate of learning may suffer no detriment at our hands.

The old cathedral of Cologne was building through six centuries. Its great architect crumbled to dust, and his name was lost to tradition ; but twenty generations toiled and died to put his sublime conception into a monument as enduring and grand as the eternal hills. It is our mission to work, as skilled laborers, upon a yet grander temple, which the unseen architect of the universe is rearing through the centuries. Our success will be measured by the spirit which pervades and characterizes our work.

A teacher may acquire a full and exact knowledge of the history of education, may have mastered the methods of instruction from Comenius to Horace Mann, and remain a dry and soulless pedagogue. The true teacher will be, must be, a scholar. I do not affirm that he must compass the circle of the sciences, or traverse all the fields of literature ; but that he must possess a spirit that instinctively seeks for the hidden soul of things, under the visible rules, forms, and methods of the books. Without this, all the diplomas of all the schools cannot make a successful teacher.

Mental and spiritual activity is the indispensable condition of mental and spiritual growth. No amount of mere manipulation or of memorizing of facts and formulæ, not comprehended, have any tendency to awaken the intellectual faculties. It is only essential truth, fused and vitalized in the alembic of thought, which, when brought in contact with the mind of the pupil, starts a corresponding vitality and growth in him. Facts and propositions are largely isolated, inapprehensible, and worthless, till we discover their esoteric significance ; but this, when seen, brings them into logical and natural relations, and the mind grasps them with

an intensity of interest that holds them as permanent possessions, and they become the *principia* of future discoveries and acquisitions. In this way, mathematics rises from the fall of an apple to the march of planets and the mechanism of stellar systems. In this way the philosophy of history is traced through the rise and fall of empires, and an unbroken affinity of nature affirmed from the potential protoplasm to the brain of a Webster.

A mind so disciplined becomes discursive, gathering its jewelled wealth from every clime and every age, and scatters it with a regal and easy hand to all who aspire to a freer and nobler life. Social customs and all forms of political organization become tributary to its resources. With an intuitive sense it perceives the natural and logical relations of events, and the hidden springs of motive cannot escape its introspection. The instruction of one educated to this habit of causal investigation is pointed, fundamental, and disciplinary. With simple and lucid utterance he lays open to a child's apprehension what, on the lips of others, seems involved and incomprehensible, and we learn that clearness of vision is essential to clearness of exposition. Scholastic training that does not develop the taste, and power to trace the reasons of things, misses the chief end of schooling, and will send into active life weak and superficial citizens.

This quality of thoroughness, indispensable in the teacher, which never rests till a principle has been hunted through all phases and statements to its source, is the personal element of success in every sphere. It is the test of personal power. We must fail without it, and we may fail with it, for it sometimes sleeps, and potential energy at rest is a Samson shorn of his locks.

To work its will, it must be aroused by some great and resistless motive. The teacher, who would realize the largest possibilities of his profession, must not only have the power to grasp principles in their simplest and clearest form, but he must be inspired by an abiding sense of the true grandeur of his calling. The part which it plays in the organic life of society must awaken his imagination and kindle his enthusiasm, till the whole force of his being is impelled by a passion that consumes other ambitions for the realization of a purer and nobler ideal in this.

To teach simply to live, or as a temporary makeshift to be exchanged for something better; to regard the business as inferior in character or influence to other employments, or to follow it solely for gain or fame, — dishonors the profession, and renders it impossible to concentrate upon it that force of will which is demanded for the highest achievements.

The iron bolts of the stanch ship, that came within the influence of the black magnetic mountain of the Arabian tale, were drawn out, and the proud vessel fell apart, a helpless, drifting wreck upon the sea. So a half-hearted devotion to any calling loosens the mental grip and disintegrates character. In our work, as in our faith, he who doubts is damned, and his manhood becomes a wreck.

He who is called to this exalted office should be inspired by the thought that he is privileged to open the springs of civilization, to lay the foundations of social order and popular self-government, to make possible a national literature, to subordinate the prerogatives of power to the welfare of mankind, to establish the rights of labor and the sanctity of property, to rescue domestic



life from the reign of lust and violence, and to give to society the prosperity born of popular intelligence, and the tranquillity which springs from an observance of the divine law.

Modern states derive their being and power from the schools. The successes of business, the genius of invention, the triumphs of art, and the force of law may be traced to popular instruction. It was the schools that conquered at Sedan, and won the prizes for the marvels of industry in our Centennial. When the schools fall, liberty and civilization will perish with them. The sole self-active agent in human history is moulded by our skill. Socrates taught in the philosophy of Plato, and Aristotle conquered the world in his pupil of Macedon. Teaching, more than statecraft or the mastery of production and trade, ministers to the edifying and progress of society, and is entitled to a foremost place in the procession of industries. Considering the relative value of the great offices of society, and their historic achievements in the march of events, our guild can accept no inferior honors, and is entitled to the emoluments which are awarded to the benefactors of the race.

It is this comprehensive view of the organic relations of our work to the largest and most permanent interests of society, that will kindle enthusiasm, and sustain the flagging energies to the end of a life of self-sacrifice and unappreciated toil. To the teacher it transforms duty into privilege; it smooths the asperities of the day, and sweetens the bitterness of ingratitude.

"Not poppy nor mandragora,  
Nor all the drowsy syrups of the world,  
Shall ever medicine thee to that sweet sleep,"

which this inward sense of a divine mission will bring to the wounded sensibilities and throbbing brain.

To one who has embraced this lofty ideal and entered the inner sanctuary of his profession, mere glitter and novelty lose their fascination, the experience of life becomes richer and deeper, its pathos more genuine, and its peace more constant as the years go by. The passions that, in one who drifts, rage and scar the soul, in him are a tempered force, impelling to a steady upward progress, and he becomes discriminating in the psychology of schools, and ranges widely in the fields of knowledge. Success is no longer the end of his ambition, but he bends all his power to the interests of humanity, and wins, unsought, an imperishable crown.

But the ideal teacher, whom we have supposed, has not yet felt the mouldering power of the strongest motive.

Our scholarship is an evolution from the past, a survival of the fittest in the science, literature, and experiences of the generations and civilizations before our time. The great mass of fancies, theories, and beliefs are sloughed and dropped into oblivion with the ages which they dominate. The hermit of the cave and the intellectual epicure, to whom study is the "chief end of man," may find pleasure in braiding the dead husks of an effete scholarship; but the practical teacher, thirsting for living truth, that he may discharge the mission to which he has been called by an inward sense, in his passionate effort to master the essentials in books, nature, and man, comes at length to a barrier which he cannot pass. He is permitted to pluck flowers and fruitage, that draw their nourishment from the other side, and he hears the murmur of sweet and winning

voices, but he is arrested by the limitation of his being. The purpose and power seen in the processes of nature that lie below the profoundest reach of his science, and especially the revelation of God in the mystery of instinct, become to him the sufficient ground of faith in the spiritual relations of man, by which he becomes a responsible agent in the unrealized possibilities of the future, and is linked with the infinite power that administers the government of the universe, and breathes a divine beneficence into the sublime march of the ages.

From that moment his eyes are opened to discern spiritual things, and the minds of his pupils are grander and more valuable than even governments and civilizations, and their full and proper development to be desired before the prosperity of business or the conservation of institutions. An intelligent teacher, acting solely from a prudent regard to the social and political welfare of society, will feel the pressure of high and noble considerations; but if he fails to recognize mind as an unfathomable, imperishable force from the Divine Hand, committed to him to train for an exalted and immortal career, he will lose that supreme motive which has proved stronger than the lust of power, which has been the inspiration of painting and architecture, and which the burning fagot and the bloody sword could not quench.

Nature has planted in the affections and responsibilities of parents an obligation to prepare their offspring for the public and private duties of organized society. Lest this obligation should be unheeded, the state, for its own safety, has embodied it in public law.

The teacher, therefore, discharges a delegated duty

and exercises a delegated power, and there is an implied contract on his part, with the state, that he will fulfil, according to the measure of his ability, the solemn obligation which he has assumed.

The true value and nature of the teacher's work may be clearly seen by considering the condition of society in its absence.

If an armed expedition were to land on these shores for the purpose of establishing a military despotism upon the ruins of the Republic, the accumulated treasures of a century would be sacrificed, and the blood of millions of our sons poured out, to avert the direful calamity; but cease to educate the young for two generations, and civil liberty would be impossible. Ignorance would establish the reign of arbitrary power as effectually as armies.

Again, could popular intelligence perish and our political institutions survive, the multifarious arts and industries that are now the source of general wealth and comfort would disappear, and our restricted resources would be consumed in the prosecution and punishment of crimes against the rights of property and the sanctity of life; the sources of intellectual pleasure would perish, social morality become extinct, and all the industrial and business currents of life flow back to primitive narrowness and deprivation. These are measures of the value of the schools, for they have their origin and support in public intelligence.

In countries and periods in which education has been private and exclusive, the professions, the pursuit of letters, and the honors and rewards of public service were confined to a limited, privileged class. The intellectual faculties of the masses drifted into waste, like

seeds scattered upon the sea, and humanity moved slowly up the plane of improvement. But by our system of public education we develop and utilize the aggregated mental force of the whole people. In this system the scale of national ability rises or falls with the grade of instruction, and must increase with the intelligence and discipline of the nation. The genius of leadership, and extraordinary gifts for public or private service, will be recognized and find their places; and when the whole force of the developed strength of a people is turned upon any object of popular desire, it becomes a majestic and resistless power unknown to the ancient nations.

It cannot be doubted that the unprecedented skill, the singular aptitude, the irrepressible enterprise, and the marvellous prosperity of our people have their springs in the educated intelligence of the masses. We are many-sided, because the appeals made upon our faculties are many-sided. The *auri sacra fames*, fed by the inexhaustible resources of the country, has imparted to our people a restlessness and force of energy in the pursuit of wealth which has no historic parallel. The discipline of the schools has ministered to the facility and power in this direction, and it is a national honor that they have done so. But is there not danger lest, in our unrivalled achievements in material enterprise, we may underrate other and higher departments, in which we are equally calculated to succeed, and in the neglect of which we must suffer? We have harnessed the forces of nature to the car of business, and are driving with furious speed. Shall we forget the fate of Phaeton? May it not yet be seen that teachers have failed in not lifting the minds of their students to these



higher realms of intellectual and moral triumph? We all study mechanics, but we do not study the mechanism of the government in which we are all responsible actors. We become familiar with the mystery and nomenclature of Wall Street, but not with the organic law under which we live. All learn to cipher, but few to discriminate as to the rights of property. We read and discourse learnedly of modern fictions, but to most Milton and Burke are "lost arts." The immortal friezes of Phidias might be studied with profit by modern architects, and the eloquent wisdom of Cicero might possibly transform a modern politician into a statesman.

The genius of antiquity is rich in applied wisdom, and the study of principles is more practical than the study of facts to the student of any profession. An educational policy that substitutes the skill and dexterity of an art for the acquisition of knowledge, and the direct discipline of mental faculty, barter moral power for mechanical facility, and tends to narrowness and superficiality, as I believe history will prove. I do not say this as a foe to industrial training, which I approve. The discipline of the intellect and the acquisition of skill are both useful, but each should stand in its lot. The one gives reach, compass, and resource to the national character; the other, dexterity and the power of accomplishment to national industry.

A foreigner of marked ability, writing some years since upon "The Progress of Nations," affirms a paucity of great men in America, on account of "the degradation of national taste and the envy of superiority." We will not stop to controvert his assumption that we have but few great men; but it is true that any people that envies superiority and patronizes mediocrity stands



sorely in need of an elevation of taste, and will soon have no one above mediocrity to patronize.

The function of the school is to lift the standard of national taste, and to beget in the people the power to discern between the true and the false, and to enjoy what is highest, truest, and best. An unschooled people in a republic will be debased and grovelling; flattered and plundered by turns, they will become the helpless but savage tools of demagogues, and will at length unbar the bloody gates of civil discord, to be rescued only by the iron hand of a military despot.

Our century of glorious history is due, under God, to the intellectual and moral schooling of the children in their successive generations. The past is prophetic of the future. We cannot stand still. To be stagnant is to decline. Civilization advances and takes on new forms at each stage of its progress. There will be new developments and new applications of force; popular theories will be abandoned and old truths formulated anew; the economies of governments and business will be moulded by experience, and our curriculums of study will change with the developments of natural and social science; but principles, and the necessity of discipline, will not change with the evolutions of history. Our educational methods must improve.

Our mission as teachers is to resist the tendency to level downward. The courses of study in our public schools must not be determined by popular vote, for the true theory of civilization is, that the public shall be lifted by a Christian scholarship, through successive grades, to what is richest, profoundest, and most original in science, philosophy, and religion.

Investigation is widening the field of science, and

giving it new applications to the enterprises of life ; the employment of machinery demands an increased knowledge of mechanics, the growing facilities of social and commercial intercourse require a wider familiarity with the laws of trade and of nations, the opportunities for gain call for a deeper grounding in the principles of justice and truth, and yet the lust of wealth has narrowed the years of pupilage to an average space of thirty months, under the teaching, too often, of inexperienced girls. The danger is that, in this hurry and madness of business, the mental faculties and moral tastes of the people may drift downward to the level of narrow and sordid conceptions, and become incapable of appreciating what is highest and purest in national life. Our school-days are too crowded for health or profit, and must be lengthened. They should also be brought into more intimate relation with our colleges, that the richer, more conservative, and fruitful scholarship of the higher institutions may flow downward to elevate and enlarge the public mind.

We shall not maintain our boasted equality by lopping off all heads above the general level, for it is those above who alone can lift our people above the average of mankind. A tame and servile spirit, that lives for the plaudits of the world, is never prophetic of a better age. We cannot live in the past, for yesterday never returns ; but, instructed by the past, we may help to determine the destinies of the future. God has committed to us a Republic won by the hardy virtues of noble sires and defended by the blood of their sons. It is the exalted mission of our profession to hand it over to future ages, first in intelligence, first in virtue, and first in wisdom, as it is now first in the power of achievement.

### III.

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#### THE NEW EDUCATION.

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My thesis may be briefly stated in these terms : *Education is a growth, and what is to be will be an evolution out of what has been. Progress in education is inevitable ; but the hope of a new education, as a thing sui generis, is a baseless illusion.*

Whatever special interest attaches itself to this theme is doubtless due to the fact that men of equal honesty and earnestness are divided in opinion as to the normal mode of educational progress, and more particularly as to the present status of the teaching art. On one side the claim has been set up that the whole existing order of things in education, at least on its practical side, is almost hopelessly bad ; and that the case is so desperate that the magnitude of the interests involved justifies and even demands an immediate revolution. When it is inquired what the new order of things is to be, what its marks are, what it is like, it is stated in reply that it is impossible to give any exact definition of the new era, but that its coming is imminent, and that when it *does* come it will be a very glorious thing. The conception seems to be that there is to occur a rather sudden winding up of the present order of things, and that the educational millennium is immediately to follow with somewhat of the suddenness of an earthquake shock.

Some confusion attends this conception from the declaration that the "new education" has had a real existence from very remote times; that all the great names in educational history, from Socrates downwards, have been prophets of the new gospel. This paradox will disappear, we may presume, by assuming that the voices of these great men were unheeded, that their doctrines had no appreciable effect on the current of educational thought, and that their interpreters have only just appeared.

Opposed to this glowing assumption of an approaching millennium in educational practice, there is the conviction on the part of very many that the dissolution of the existing order of things is not imminent; that thus far the history of education has shown only continuity of growth; that the future is doubtless to exhibit a series of changes for the better, but that this better future is to be an evolution out of a good past. These men believe that the main lines of educational theory have been pretty firmly and correctly established, and that the most hopeful and fruitful field of effort is that of extending and co-ordinating these lines of thinking. It is believed to be unwise and unnecessary to break with the past; that not only is substantial progress entirely compatible with the conservative tendency, but that any other mode of progress is an illusion full of danger.

We thus have two schools of educational thinkers, so sharply defined as to be in some sort antagonistic. It is charged against the leaders of the so-called reform party that they claim a proprietary right in the rubric "new education" as a sort of trade-mark, and that their enthusiasm has a certain commercial aspect that is not

prepossessing. *Per contra*, it is alleged that the representative adherents of the *status quo* are blind leaders of the blind; that, conscious of their inability to endure the light of the coming glory, they would protract the era of darkness; and that when they speak irreverently of the "new education," they are moved by envy.

These rivalries, it must be confessed, are not altogether pleasant; but let us find some consolation and even encouragement in the fact that we are now fairly entering into the second of three stages of opinion noted by Mr. Spencer ("Education," p. 161) as the "unanimity of the ignorant, the disagreement of the inquiring, and the unanimity of the wise." If we are ever to attain to this third state, "the unanimity of the wise," we must needs pass through this intermediate stage of disagreement. "It is sometimes necessary to fight," says Aristotle, "but all to the end that we may have peace." It is the part of wisdom, doubtless, to abridge, as much as possible, this necessary period of dissent, and it is this thought that dictates the matter and the method of my essay.

As a constitutional aid towards harmonizing the two conflicting phases of opinion that have been noted, let us bear in mind that this divergence of opinion is due, in part at least, to differences in mental constitution. There are but few minds in which the intellectual and the emotional elements are in a state of equipoise, and a marked preponderance of either element entails a weakness of disproportion. An excess of feeling leads to great energy of movement, but it is usually accompanied by a marked defect in the power of clear insight; there is superabundant force, but it is ever prone to play antics through lack of rational direction. On the



other hand, disproportion on the side of the reflective habit almost inevitably entails some slowness of motion and an indisposition to move out of beaten tracks. Here we have an instance of a very common form of the division of labor. But few men, it seems, are constructed on so catholic a plan that they embody at once great motive-power and superior ability in the line of clear thinking. In my boyhood I recollect it was a question of serious debate whether it was the ball or the powder that killed the bird; and we find men stoutly affirming, some that the world is moved and governed by ideas, and others that sentiment is the universal motor. I now incline to the opinion that it requires the joint effect of powder and ball to kill the bird. Lest I lose myself in what may prove to be a digression, let me make haste to say that, in educational reform, the thinker and the enthusiast both have their uses, and that neither should feel a contempt for the endowment he does not chance to have. A man who does a good quality of thinking may count himself a useful member of the profession, for his ideas sooner or later will be put in motion by some one who has a surplus endowment of sentiment. The great danger of the man overstocked with sentiment is that he is often indiscriminating in the selection of ideas which he is to convert into mobiles. Rousseau put some very fine and hence very powerful sentiment back of some very foolish and even very false ideas; and though a century has passed since his day, these false notions are still moving briskly on their errands of mischief. At this point, loyalty to the law of the division of labor is the saving clause. Achilles had not been so famous a warrior, had he not gone to Vulcan for his suit of armor;



and Phaeton had doubtless not gone on his mad course and wrought such mischief, had he taken counsel of Atlas or some competent astronomer of his day.

I now turn to the main purpose of my paper, which is to discuss the normal mode of progress in education, to trace the main lines of educational thought thus far, and to determine, with some degree of probability, what may be expected of the future.

The law of progress may be comprehensively stated in these terms: *inheritance supplemented by individual acquisition*. We shall best conceive the mode of progress in general, if we think of the human race as composed of a series or succession of generations, each of which receives from its predecessor the net results of its toil and thought, adds to this inheritance the fruits of its own industry and economy, and finally transmits the aggregate to its successor. The labor of these successive generations is not the labor of Sisyphus, but each starts on the upward march at the point where its predecessor stopped, and thence lifts the weight to a still higher level.

Let it be noted that no individual can renounce the inheritance into which he is born. That relapse to a state of nature, which Rousseau and his disciples so ardently and so eloquently long for, is a thing not only impossible, but even inconceivable. What are some of the items of this inalienable inheritance? A purified atmosphere, protection to life and property, a longer average term of life, the division of labor, means of rapid communication, language with its ready-made distinctions and classifications, and, subtler still, enlarged capacities of mental insight and acquisition, and innate predispositions amounting to ready-made habits.

Who can refuse such legacies if he would? Who is there that would renounce them if he could? Who can abide the philosophy that recommends a perennial relapse towards barbarism?

One element of this inheritance has such a direct and important bearing on the main question in this discussion, that I must give it some emphasis. Language, with its ready-made abstractions, generalizations, and distinctions, is just as truly a part of the child's natural environment as climate, atmosphere, soil, and landscape; and the truths formulated in language are objects of study just as natural and legitimate as plants and rocks and animals; and still more, speaking generally, these formulated truths are just as easy of apprehension as the physical phenomena that constitute a part of the child's environment. The apprehension of formulated truth begins the moment the child begins to interpret language, and proceeds *pari passu* with his apprehension of physical phenomena. I know of nothing more unfounded in fact and philosophy than the current assumption that it is easier for a child to apprehend thunder and rain, or even flowers and butterflies, than the bits of household wisdom that penetrate his mind through the medium of language. If it is so easy and natural for the mind to analyze and comprehend concrete presentations, how are we to account for the slow progress of physical science? If it is so very difficult to comprehend abstract truths, how are we to account for the early cultivation of grammar, mathematics, and ethics? For the farmer, the perfected reaper and the formulated truths of agricultural chemistry are all simple facts of inheritance; and he may as reasonably be required to reinvent the reaper, as to rediscover the science. In

both cases the obligation is to accept, to use, and, if possible, to improve. There is no more obligation to repeat the experiences of the race in alchemy and astrology, than in the use of the sickle and the cradle.

Of individual acquisition, or the second element in progress, four things are to be noted: (1.) If the major and mighty task of each generation is rediscovery, the opportunity for discovery is made almost infinitely small. (2.) The prerequisite to invention, improvement, and reform is a knowledge of what has come to us in the way of inheritance. (3.) To only a few men in a century is it granted to make absolute additions to the world's stock of knowledge. (4.) For the most part, the task of the thinker is to extend old lines of thinking, to detect in established general truths their more occult implications, and to collate and co-ordinate the *disjecta membra* of possible systems of truth.

If one is to set up as an innovator, or even as a reformer, he has no claim to a moment's consideration, unless he has ascertained what has already been done in his proposed line of improvement, and has also mastered the general principles on which his invention rests. I shall not soon forget the loss of time and patience entailed by the persistence of an enthusiastic youth who had invented a machine that would surely run till it was worn out. He had all the positiveness and intolerance of ignorance. A month's study of mechanics, or, perhaps, a day's visit to one of the museums of the Patent Office, would have saved him from the mortification of failure and from the loss of his patrimony; but his ignorance made him the easy victim of his glowing enthusiasm. At the present rate of acquaintance with the history and the science of

education, it is still possible, as the record shows, to invent school supervision and the word method of teaching children to read. I imagine that if the schoolmaster were to turn lawyer, or physician, or clergyman, for an hour, he might astonish these several professions with startling disclosures. At least, he might easily berate them for their stupidity and ignorance.

"Great minds," says Richter, "speak to us from the vantage-ground of centuries." The immortality of certain books lies in the fact that they anticipate the thinking of a remote future. They trace in faint outline the course which human thought is to traverse through the coming centuries, and all subsequent thinking is but the fulfilment of these ancient prophecies. I am sure I do not overstate the fact when I say that the best thought of the best thinkers, through all the past centuries, has been devoted directly or indirectly to the problems of education, and that there is not a single phase of this problem which has not been subjected to the test of experience. The Bibles of all ancient peoples have been text-books for ethical instruction, and contain, by implication, a body of educational doctrine. I believe it to be a comparatively easy task, by a process of legitimate interpretation, to construct a sound and sufficient body of educational truth from the Christian Scriptures. Socrates, Plato, and Aristotle, while writing on ethics and politics, were compelled to discuss the question of education, and their statements were so comprehensive that they anticipated our modern theories and methods. In making these statements, the truth I am trying to impress is this: There is no probability whatever that there is to be such a sudden and glorious dawn of discovery as the "new education" presumes to advertise.

M. Compayré has, with rare critical insight, made a masterly survey of the history of educational doctrines and methods, and I borrow this quotation in confirmation of the position just taken: "The desirable thing just now is not so much to find new ideas, as properly to comprehend those which are already current; to choose from among them, and, a choice once having been made, to make a resolute effort to apply them to use. When we consider with impartiality all that has been conceived or practised previous to the nineteenth century, or when we see clearly what our predecessors have left us to do in the way of consequences to deduce, of incomplete or obscure ideas to generalize or to illustrate, and especially of opposing tendencies to reconcile, we may well inquire what they have really left us to discover. . . . In truth, for him who has an exact knowledge of the educators of past centuries, the work of constructing a system of education is more than half done. It remains only to co-ordinate the scattered truths which have been collected from their work, by assimilating them through personal reflection, and by making them fruitful through psychological analysis and moral faith." \*

One element in human nature is an upward tendency in the line of growth; and civilization is but the actual outcome of this instinct on a vast scale. The growth of an individual in stature, and the growth of the race in knowledge and refinement, are analogous facts. In both cases, growth is predetermined; it is a law binding on the individual, and on the race as a whole. Much light will be thrown on these "great expectations" by observing the actual modes of growth which constitute prog-

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\* *Histoire de la Pédagogie*, pp. 14, 15.



ress. "Progress," says the *Dictionnaire de Pédagogie*, "is not a force that acts by fits and starts, but is a logical and graduated evolution, in which the idea of to-day is connected with that of yesterday, as the latter is to a still more remote past." (1<sup>re</sup> *Partie*, p. 1436.) This is a fair statement of the *ideal* mode of progress, but the historical or actual mode is very different. Instead of continuity, symmetry, and moderation, the outgrowths of reason and reflection, we see the overwrought, the unsymmetrical, and the spasmodic, the result of impulse and sentiment. A strong feeling starts a movement, the rising fervor gives it a growing momentum, and then it proceeds quite independent of rhythm, rhyme, or reason. But finally a counter-sentiment is engendered, a recoil movement is begun, and the old exaggeration gives place to a new one.\* A common characteristic of these impulsive movements is that they are blind. Not only is the objective point seen as through a sunset mist, but this point is not discerned in relation to others of co-ordinate rank, and most often no others are seen at all. The mind of the inventor is lacking both in clearness and perspective; it seems that the very condition of feeling intensely is to see obscurely, or at least confusedly. The mind that does not discriminate cannot deliberate. It is usually asserted that the normal stimulant to activity is a feeling, either of pleasure or of pain. It would be better to call this the natural stimulant. The animal, so far as we know, is moved to activity only by some strong feeling, and the same thing is true of the savage and the infant: but the chief ingredient in

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\* "The suppression of every error is commonly followed by a temporary ascendancy of the contrary one." — SPENCER, *Education*, p. 102.



the motive that governs the sage is intellectual. With reference to civilized man, motive is composed of two elements, thought and feeling; and in the ascent towards the highest type of development, the thought element attains a rising domination, while the element of mere feeling loses its domination in the same ratio. This statement refers to the man as determining his own conduct. When his purpose is to determine the conduct of others, he will appeal to the element that is supposed to have the greater domination; to feeling, if he is addressing a mob, but to the intellect, if he is addressing men capable of deliberation. Now the truth I wish to insist on is this: If progress is to be continuous, symmetrical, and sure, it must be based on motives of the reflective type. The men who direct such progress must discern clearly, and must then appeal to the discernment of others. While saying this, I am distinctly conscious that, in dealing with men, we must take them as they are; that if we are to move them, we must appeal to the motive that is in the ascendent, and must use that form of power which we chance to possess. My purpose is to point out the evil consequences of addressing the feelings rather than the reason, and to indicate the desirableness of walking by the light of reason rather than by the *ignis fatuus* of feeling. Most reforms are doubtless of emotional origin, but their final support is reason; they are saved by the potency of ideas. It were better, it seems to me, if reforms were to have their origin, continuance, and consummation in reason. As we listen to the fervid exhortations of the reformer, we may have almost absolute assurance of three things: (1.) He is leading us away from some substantial truth that has been allowed to trespass on

other and related truths. (2) He is leading us towards another truth which is greatly exaggerated, because seen through the mists of feeling. (3.) These promises must be subjected to the reductions of reflection and cool common-sense before they can have a substantial value.

If any proof were needed of the sheer extravagances of the educational reformer, it might be found in such declarations as these: "I have turned the European car of progress quite round," said Pestalozzi, "and have set it going in a new direction." How charming is such simplicity and assurance! The course of European civilization had been wholly wrong till Pestalozzi's day, and he, in his own might, had reversed the march of that civilization! The philosophers, moralists, teachers, and statesmen previous to his time had been radically wrong. In the fulness of time he had come to set them right!

Rousseau's favorite injunction was, "Take the road directly opposite to that which is in use, and you will almost always do right." Here the presumption is the same as before; the world had got into a very bad way. Rousseau was the first one to discover the fact, or at least the first who had the wisdom to point out the right way. I maintain that the mind which can believe that the whole existing order of things is wrong, and would counsel a revolution in favor of his own ideas, is essentially unsound and untrustworthy; for it is not even conceivable that a line of policy which has had the long sanction of the wise and good is wholly or even mainly wrong. It is only presumption and ignorance and unbridled sentiment that can go to such lengths.

A Greek proverb says that "a mob has no brains,"

and we shall form no mean conception of education if we define its purpose to be the disintegration of mobs; the thought being that each individual should have a brain of his own, to the end that he may reason and reflect, and so be in a condition to act for himself, instead of moving with the herd at the dictation of a self-constituted leader. It seems to me discreditable to the teaching class that educational epidemics are so easy to start, that they occur so often, and that their victims are so numerous. In these phenomena there is something of the regularity of law. We cannot indeed predict what the next craze will be, but we may be sure that a new one will follow the termination of the one now in progress, that it will leave many reminders of debility and some of strength, and that those who survive the distemper will marvel at their own frailty. What I aim at saying is, that this prevalence of hobbies bespeaks unsoundness in the body of the teaching profession, and that the only radical cure for this intellectual distemper is the habit of treating educational questions with judicial calmness and fairness.

In the next place, the course of my argument leads me to notice the main phases of the educational problems that have been developed by the thinkers of the past, to the end that we may form some reasonable conjecture as to the probability of lighting on essentially new phases of the problem. If but little has been discovered, the field of exploration is large and full of promise; but if the process of discovery has been long continued and thorough, if the discoverers themselves have been men of pre-eminent ability, and if this exploration has been in any sense complete, then the hope of a new era in education is visionary. If a sea-faring man were

to attempt to enlist adventurers for the discovery of a new continent in the Pacific, no matter how fervid his eloquence or how boisterous his appeals, he would find no following among the well informed. The continents have been discovered; it only remains to occupy them and to improve them.

To make this inquiry eminently fair, let us consider education in its most comprehensive sense, and define its purpose to be to fit the human being for complete living. For a man to live completely is to fulfil perfectly all the functions that can reasonably be demanded of him. A man owes duties to himself, to his family, to society, to the state, to the race, and to his Creator; and to fulfil these duties he needs physical, intellectual, and moral power, and instrumental knowledge adapted to the requirements of each class of demands. We may simplify this statement by saying that the ideal education requires the most complete development of the body and of the mind, liberal supplies of knowledge for use, and, finally, a concentration of these powers on specific lines of activity. We now wish to know what phases of this complex problem the education of the past has left untouched, so that we may discover what remains for the "new education" to undertake. The problem of physical training was solved in ancient Greece, and so perfectly that any improvement on it is manifestly hopeless. All that moderns can do is to imitate it. Specific physical training in the line of handicrafts and trades was a prominent element in the education of the ancient Jew. Sparta and Rome educated their citizens for military service. The highest conceivable type of intellectual training, the purpose of which was to make the mind the perfect instrument

of thought, was methodically discussed by Plato, and actually given by Socrates. The commercial value of knowledge was emphasized by the Phœnicians and the Egyptians. Education for the civil service was and now is the hobby of the Chinese. Education in view of the future life was the preoccupation of the ancient Jews; and ethical training was a characteristic of all ancient systems of education. Education for culture was exemplified in Greece, and education for practical ends in Rome; and those two lines of thought are now running side by side in every college and even in every high school. We see compulsory education in fact among the Jews, and in theory in Plato's "Republic." The duty of the state to administer education was emphatically declared by Aristotle; it was to be public, and common to all. Twenty-three centuries before the "New Departure in the Common Schools of Quincy," the appointment of a superintendent of schools was distinctly recommended by Aristotle. Object teaching is as old as the burning bush and brazen serpent; the highest type of it was exemplified in the teaching of Christ. The instruction of children by means of games was known and practised by the ancient Egyptians. Paul knew and stated the characteristic difference between the child and man as to the comprehension of truth. The doctrine that true education was a process of unfolding from within outwards, that science could not be taught, but only drawn out, was taught and practised by Socrates. The conception of education as a growth is embodied in David's first Psalm, and appears and reappears throughout the New Testament. The instrumental value of knowledge has never been more forcibly expressed than by the author of Ecclesiastes.



Oral instruction *versus* text-book instruction was a controverted question in Plato's time ; and in his decision, Plato was as profoundly wrong as some moderns who have decided the question. This statement falls far short of a *catalogue raisonné*, such a one as might be made without great labor ; but though it is restricted to the ancient period, I submit that it establishes a very strong improbability that any startling truth, such as the "new education" promises, remains to be discussed ; and this improbability becomes almost absolute when we include the developments of educational doctrine that have been made during the last eighteen Christian centuries. In general, I despise alliterations, and particularly when they are invented to give currency to educational cant and error ; but the truth as I see it may be expressed in these terms : educational truth of undoubted value is not likely to be new ; and what is brand-new in education is not likely to be true. Of course, I make this statement with reference to doctrines and principles. But some one will ask on what ground it is that the discovery of new truth is not as probable in education as in physical science. Two things may be said in reply : (1.) The discoveries in science do not consist for the most part in principles and laws, but rather in applications and extensions ; it is this line of discovery that is always imminent in education. (2.) Besides, the human mind, the great constant in education, has been a subject of study, just as accessible to the ancient as the modern. Every man, in fact, carries about with him in his consciousness the material of educational study, and it is for this reason that the improbability of essentially new discoveries is so much greater in education than in physical science.



Other constants are the relation of man to man, and of man to his Creator. Is it probable that these relations are liable to any radical change? If not, the probability of new discovery is cut off in this field. The relations of man to the state have not been so constant, and, in consequence, the conception of education has varied through the centuries; but what probability is there that any new type of such variation is to be developed in the future?

What shall we say of man's duties to himself? Is there any probability of a radical change in this direction? Next to the relations of man to his Maker, these relations of man to himself seem to me to form the chief constant in education. Man is counted as a gregarious animal; but he might be most characteristically described as the solitary being. Self-consciousness perforce makes him such; though being in society, man communes constantly and chiefly with himself; and save one, education has no higher or holier purpose than to fit man to be his own companion. "Tell me, Euthydemus," said Socrates, "have you ever gone to Delphi?" "Yes, twice," replied he. "And did you observe what was written on the temple wall, KNOW THYSELF?" "I did." "And did you take no thought of that inscription, or did you attend to it, and try to examine yourself to ascertain what sort of a character you are?" Then the dialogue proceeds with the usual cross-questioning, and in the end Euthydemus stands revealed to himself, and he is henceforth his own companion, and is inspired to make himself meet for such companionship. Our reformers need to be reminded that the young should be taught to *be* as well as to *do*, which is now regarded as the principal thing. My

purpose in making reference to this phase of the educational problem is to point out the fact that the striving after the ideal man is virtually a constant in education, and that there is no probability that there is to be any abrupt change in this conception. What is to follow is virtually what has been. The types of education that have come down to us from the ancient world may be designated as follows: the historical, the intellectual, the ethical, the religious, the practical, the political, the contemplative, the liberal. The general style of education has always responded to the dominant conception of man's destiny. When this conception has been partial or narrow, education has likewise been narrow; and when this conception has been broad, the education has been liberal. The fact I wish to state is, that these types are exhaustive, or, at any rate, are so comprehensive that it is wholly improbable that there can ever be an education into which several of these types do not enter as factors. That there should be a new education, one of two things, speaking generally, would be necessary: either a radical change in the constitution of human nature, or a radical change in human destiny, or, what would amount to the same thing, a discovery that the present conception of human nature is a mistake. A mere modification of either of these conditions would entail only a modification of the existing education; but an essentially *new* education would require a substitute for one of these existing sets of conditions.

I am aware that a pretence has laterly been set up, that such a change in conditions has actually taken place in the shape of a revised conception of what may be called child-mind. The dominant conception has

been that the mind of the child and the mind of the adult are essentially the same ; that from the one to the other there is complete continuity of growth ; that the one becomes the other by a series of unconscious and indefinable transitions ; that they are the very same in kind, differing only in relative development and power ; in other words, that the child is a little man. The new conception is to the effect that child-mind is a thing *sui generis*, peculiar in kind, structure, ability, and laws of growth. If this conception be admitted, it follows that there may be a "new education" for children, based on the constitution of the being that up to this time has been wholly misunderstood. In respect to this assumption, I would make the following observations : —

1. *There are no analogies to support it.* In the vegetable world there is unbroken continuity from the tender blade that has merely begun its growth, up to the robust tree that has reached the term of its development. The mode of growth, at any given instant, is identical with the mode of growth at the next instant. There is, from first to last, a continuity of structure that is absolutely unbroken. There is no moment at which the plant *ceases* to be, and the tree *begins* to be ; the plant and the tree are one.

In physical growth there is the same fact of absolute continuity in structure, and nutrition is administered by laws that act with absolute uniformity. There is not an infant digestion as distinguished from adult digestion. Different kinds of food may be required in the two cases ; but if digestion takes place at all, its mode is the same in both cases. If the claim were to be set up by some "new light" in physiology, that we, as yet, know

nothing of infant digestion, it would be a sufficient reply to say, that as we know much of adult digestion, we also know much, by implication, of the digestive process in infants. So far as the facts of nurture and growth are concerned, the infant and the man are one.

2. *The consensus of philosophic opinion supports the notion that there is but one psychology.* The classical writers on mental science, ancient and modern, discuss the phenomena of the intellectual life as constituting an organic unity; they make no attempt to classify those phenomena on the basis of age. The dominant conception of to-day is, that the beginnings of the various modes of mental activity are virtually simultaneous, but that their rates of development are unequal; that the organic modes of mental activity are the same for the child as for the man; that the constitutional difference in the two cases is one of relative power; and that the difference in product in the two cases is one of relative perfection. In other words, so far as the nature of mind is concerned, there is but one psychology and one logic. So far as they both conceive or imagine or reason, the child and the man are obedient to identical laws; and whatever differences may appear in the products of these several acts are due to unequal rates of work, or to different degrees of perfection.

3. *The supposed difference between child and man, as to mental constitution, has led to serious errors in practice.* In some instances instruction has been administered on the hypothesis that the child's mind passes in regular succession from sensation to perception, from perception to conception, from conception to reasoning, etc., etc.; and that while one of these modes of mental activity is in progress, there is to be an exemption from all others.

Such instruction is necessarily scrappy, discontinuous, and in the highest degree unnatural. The truer conception is, that even in the child all those modes of mental activity are displayed simultaneously, and that the nurture should be catholic and wholesome. Another error consists in a systematic underrating of the child's ability, whereby instruction becomes so childish as to be trivial, trifling, and, to a bright pupil's mind, patronizing. To secure that degree of reaction which is necessary for real discipline, instruction must be pitched to a key somewhat above the plane of the child's spontaneous mental state. "Speak to the child two years old," says Richter, "as though he were three." The teacher who regards her pupils as little men and little women, who makes real demands on their intelligence, and perhaps presumes somewhat on their ability, follows a truer psychology than one who minces and subdivides more than is meet. In saying this, I do not forget the old error of indiscriminating diet. But I think the modern error is the more to be deplored. Strangely enough, some who make the most absolute distinction between children and men as to mental constitution, demand that a child's conceptions shall be as definite and adequate as those of a more mature mind. The child, like the primitive race, lives in an atmosphere of delicious vagueness that inspires the poetic instinct. This is a clear instance of what we may call the child's *nature*. The conceptive power is high, and the discriminating power correspondingly low. During that period when a stick can be so easily transformed into an angel with blue eyes and golden hair, let us not demand a definition of geometrical figures, or even an accurate distinction in the meaning of common words.



4. *The main laws of mental life, for child as well as for man, have doubtless been discovered and formulated.*

This probability rises almost to certainty from the fact that mental phenomena appear in the consciousness of every thinking being, and that these phenomena have been studied by the highest intelligences of all ages. That there remains any real discovery yet to be made seems to me the most improbable of assumptions. In his recently published volume of essays, Mr. Bain expresses this thought: "I deem it quite possible to frame a practical science applicable to the training of the intellect that shall be precise and definite in a very considerable measure. The elements that make up our intellectual furniture can be stated with clearness; the laws of intellectual growth or acquisition are almost the best generalities of the human mind; even the most complicated studies can be analyzed into their components, partly by psychology, and partly by the higher logic. In a word, if we cannot make a science of education, so far as intellect is concerned, we may abandon metaphysical study altogether." ("Practical Essays," p. 147.)

It will doubtless be said by some that there is hope for a revolution in education in the "new psychology" which is now promised. The old method of psychological study by introspection has had its day, it is said, and the new method, which proceeds by the examination of results, or by the use of the scalpel and glass, is just making its appearance. I feel compelled to summarize what I think on this topic as follows:—

1. Suppose that a curious piece of mechanism had been discovered by the earliest race of thinkers, but of such construction that its parts and mode of action could only be *observed*. Suppose, further, that this piece



of mechanism had been passed from hand to hand, and had been made the object of long-continued study by the acutest thinkers of all ages down to the present, what degree of probability is there that any important fact or law of this piece of mechanism would escape this acute and secular examination? Is there even the possibility that either the mode of study or the general results of such an investigation can be discredited by any new method? This supposed case typifies in all essential respects the history of psychological investigation. Mental phenomena are just as real and just as obtrusive as physical phenomena, and the method of observation and induction has been applied as rigorously in the first case as in the second.

2. The method of verification, by the study of products or results, is very ancient, as may be seen by consulting Plato's "Republic," Book II. 368. It is also modern, as may be seen by consulting Cousin's "Lectures on Modern Philosophy," Vol. I., Lecture II. Let this examination of products be accepted for what it is really worth, and that it is worth much I cheerfully admit; but it is in no sense a substitute for the reflective study of mind itself. We would learn but little of the structure of a grist-mill by simply examining the feed and flour that are found in the bags.

3. The microscope and the scalpel have told us much, and will doubtless tell us much more, about the structure and functions of the brain, and much light is thus thrown on the physical conditions of mental life: but mental phenomena will forever escape the senses of sight and touch; they must continue to be studied, as they always have been studied, by the mind's own reflective effort.

4. The fate of phrenology might teach us a wholesome lesson respecting the value of the physical method of studying the mind. On the basis of these pretended discoveries, a reform in education was advertised and even attempted; but beyond an increased interest in physical education, the world still keeps on its accustomed way.

In what has preceded I have attempted to assign my reasons for the belief that no revolution in education is imminent; that no new discovery is likely to be made in the nature of the human mind, or in human destiny, that will make necessary or even possible a "new education." That virtual discoveries are still to be made in both these fields, and that there is to be continuous and indefinite progress in education, I most firmly believe; and on these two topics I would add the following observations:—

1. In the sciences of psychology, logic, ethics, sociology, and physiology, we have the *dissecta membra* of a science of human training; and in the co-ordination and harmonizing of these elements, and in the transformation of these first truths into rules for practice, there is work enough for several generations of clear-headed thinkers. It is not a little amusing to note the fervid aspirations of some for new and far-remote worlds to conquer, while there are whole continents lying before their very doors waiting to be explored and appropriated. There is not an elementary text-book on mental science that does not embody doctrines which, if rigorously applied in the deductive way, would expand into a volume of rational method. The law of the descent of the mind from aggregates to elements, and from the vague to the definite, is just as well established as the law of gravi-

tation, and is just as comprehensive in the scope of its applications. Almost the whole of method is implicated in this fundamental law. Here is a world that has long since been conquered by mental science, but it still waits to be explored and appropriated by educational science. I think it must be counted one of the standing marvels of educational history that so open and so inviting a field has not been cultivated.

Another field quite as broad, perhaps even more inviting because of its difficulties, and as yet hardly touched by the pioneers in educational science, is the doctrine of motive. This doctrine underlies the whole subject of school government, and even the whole art of giving instruction. If we define teaching as the art of causing pupils to learn, we may truly say that this entire art hangs on the deft manipulation of motive.

Not much substantial progress can be made in education, as it seems to me, till we have a pretty definite scheme of education values. We need to know, with considerable exactness, both the quality and the amount of work that can be done by the educational agents, arithmetic, grammar, history, science, etc. This discussion was begun in earnest by Plato and Aristotle, and has been continued by Bacon, Whewell, Spencer, and Bain; but the results thus far have been at most qualitative. Here is a most interesting and a most fruitful field for patient study.

I have now briefly indicated three important regions of professional investigation; and I submit that some of the surplus zeal of our reformers might be most profitably turned into these channels.

2. At this point some will doubtless interpose the

objection that the mode of study I have commended will induce a surfeit of educational theory, and will demand a course of study on the practical or experimental plan. I am glad to respond that, if I have any hobby whatever, I think it is the study of the experimental phase of the educational problem. In all the past, the business of education has been conducted almost wholly on the experimental plan; and I firmly believe in the almost incomparable value of a careful study of these long-continued and varied experiments. I have already pointed out the fact that all conceivable solutions of this complex problem have been attempted; that the Greek, the Roman, the Jew, the Egyptian, the Hindoo, the Persian, the Protestant, the Catholic, the Free-thinker, the German, the Frenchman, the American, the Englishman, the Monarchist, the Republican, the Absolutist, that everybody in fact has been working at some phase of this problem ever since the dawn of civilization; and now it is to be observed that through the foolishness of reading we may make a critical survey of all the notable instances in which education has thus been put on trial. How are we to account for the curious fact that the teaching class, as a whole, is profoundly ignorant of the history of education? Of this there can be but little doubt; the effect of such a study would be both conservative and constructive; there would be a hearty respect, if not reverence, for the present status of education, as it has been the issue and outgrowth of the entire past, and we would witness an orderly and rational effort to determine the future of education by legitimate processes of growth. I may be too sanguine in my faith in the utility of educational history as a means of promoting continuous and orderly

growth; but I can scarcely doubt that it would be a virtual specific for educational spasms.

3. As I conceive the nature of real progress in education, the philosophy of spirit is the light beaming from afar that points us towards the harbor we hope finally to enter, while the history of education is the light that keeps us in constant remembrance of the port from which we are sailing; and it is only by correcting our course by means of these two lights that we shall make our voyage safe and continuous. If I may still use this figure, our course hitherto has been too much like that of drifting along unknown shores while on a purposeless voyage, or like that of tacking before head winds, or of being fiercely driven first by a gale blowing from one point of the compass and then from another. What we need is to bring about a forward movement in a direct line, by availing ourselves of the grand resultant of all the forces we can press into our service. The chief work of the present, as it seems to me, is, first, that of "taking stock of our progress," as Mr. Spencer says, and then of patiently co-ordinating, harmonizing, unifying, and systematizing. It is in these regions that we are to court the gales of a real progress.

I will now consider the claims of the "new education" on the intelligence and confidence of men by reason of what it has actually accomplished. I wish, if it be possible, to discover the general direction of this new movement, whether it is towards the truth or away from the truth. That there are some difficulties in the way must be admitted. It is hard to analyze an ejaculation, an aspiration, or a sigh; and while the wholesale denunciation of whatever has been and is shows us pretty plainly what our reformers propose to abandon,



they give us but little help in determining what will be substituted for the chronic ills of the present. Fortunately, however, this new educational gospel has apparently settled one article of its creed, and so has put one item of doctrine into a tangible shape. As I repeat this favorite formula of the "new education," please recall the saying of Pestalozzi about reversing the European car of progress, and the advice of Rousseau about taking the roads directly contrary to the ones in use. Among the noted educational reformers, exaggeration seems to be a hereditary trait. The creed of the "new education," so far as it has been formulated, is embodied in this text: *We learn to do by doing.* My purpose is to discover whether this new movement is in the line of historic truth, or whether it is a departure from the truth. Twenty-four centuries ago, Bias, one of the seven wise men of Greece, left to the world this apothegm: *Know and then do.* Twenty-one centuries later, Lord Bacon wrote: "Studies perfect nature, and are perfected by experience." In both these cases the sequence is the same: the antecedent to *doing* is *knowing*; we learn to do by knowing. At the present moment, all professional and technical instruction is administered on the hypothesis that knowing is the necessary preparation for doing; and the term "quackery" has been set apart to express the common contempt for the practice of learning to do by doing. Here are three landmarks appearing at intervals through a long procession of centuries, and they are all in a direct line. The thought of Bias is sanctioned by Bacon, and embodied in the very civilization of the present moment. If anything has been settled by the experience and common-sense of mankind, it is that action should be



preceded and guided by knowledge. Now, what shall be our judgment of a proposed revolution, the first and, so far as announced, the only principle of which is a bald denial of a universal truth? This seems like the culmination of presumption. Pestalozzi would reverse the car of European progress; but the latest reformers have undertaken the task of reversing the car of the world's progress. But Pestalozzi failed in his modest undertaking. We must distinguish the intellectual phase of this movement from its emotional phase, and in respect of the former, it seems to me that the outlook is hopeless enough.

The main conclusions of this inquiry I now summarize as follows:—

1. The promise of a "new education" as something radically different in principle and method from the education of the present, implies a gross misconception of the nature of normal progress, as well as an ignorance of what has already been done in this field of human effort.

2. The possibility of a complete revolution in education implies one of three things: (1) either that there is to be a radical change in human nature; or (2) a radical change in human destiny; or (3) that educational processes hitherto have not been adapted to human nature or to human needs.

3. As there is not the least probability of any imminent change in the constitution of the human mind, or in the conception of man's destiny and needs, and as it is inconceivable that the world thus far has been radically wrong in the practice of education, it is inconceivable that there is to be a winding-up of the present order of things in favor of an essentially new order of things.

4. The fact that education has been studied and practised from the earliest historic period to the present, excludes any probability that there remains any essentially new phase of the problem to be presented.

5. Throughout the entire past education has been defective through some violation of the laws of symmetry, or proportion, or harmony. While holding very strongly to one phase of the problem, the mind has let slip other phases of co-ordinate importance ; so that while there has been progress on the whole, it has not been steady and symmetrical, but intermittent and disproportioned.

6. Improvement in the theory of education will consist for the most part in extending, co-ordinating, and harmonizing old lines of thinking, and in forming a catholic view of the problem of education from the scientific study of human nature. The history of education should be made the counterpart and proof of the science of education.

7. In whatever has life, there will be the appearance of something new until the term of perfect development has been reached. In a certain sense, the tree of to-day is a new tree as compared with the tree of yesterday, which might be called the old tree. In the same sense, the education of next year will be new, as compared with the education of this year. If, in the case of the tree, we were to imagine it as it probably will be after a period of a hundred years, supposing its life to be indefinite, and were then to contrast that probable tree with the actual one of to-day, we might, by cancelling the additions of each day in the century, make it appear that the two trees belong to different species, and might even work ourselves into a state of contempt for the thing that is before our eyes.

8. When we consider the characteristic marks of the current education, and then the marks which characterized the education in vogue just prior to the Reformation, the contrast is so striking that there is a justification for speaking of the two systems as the "old" and the "new," so long as we are intent on the study of contrasts; but when we observe more closely, and discover the large element of sameness that runs through the two systems, it becomes plain that there has been no break in continuity, and that after all the fact of unity is the most significant mark.

9. In the cant of the day, the term "new education" is the name for an aspiration; it marks a contrast between what *is* and what *is to be*. "No one can tell," we are assured on authority, "what the so-called New Education really is, from the very fact that many, if not most of its principles and resulting methods have yet to be discovered. We stand on the border-land of discovery and education. . . . *There is an immense margin between the known and the unknown in education.*"\* Let us make an allowance for the distortion of sentiment, and call this hypothetical margin *wide* instead of *immense*. What point in the history of the last twenty-four centuries can we select, and say with any degree of truthfulness that the margin between what was then known on the subject of education and what is now known is even wide? What ground is there for assuming that there will be a wide margin between the present and the near future in the matter of education? I see no ground save in a distempered imagination.

10. That there is "an immense margin" between

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\* Preface to the American edition of Tate's "Philosophy of Education."

what is really known on education and what might be known by historical study, is discredibly true. The most fruitful field for investigation is the past rather than the future. There are some indications that we are indeed on this "border-land of discovery." If this be true, there are startling revelations in store for some. There is a thought in this quotation from a recent sermon by Archdeacon Farrar, that is worth considering:

"We boast of our educational ideal. Is it nearly as high in some essentials as that even of some ancient and heathen nations long centuries before Christ came? The ancient Persians were worshippers of fire and of the sun; most of their children would have been probably unable to pass the most elementary examination in physiology, but assuredly the Persian ideal might be worthy of our study. At the age of fourteen,—the age we turn our children adrift from school, and do nothing for them,—the Persians gave their young nobles the four best masters whom they could find to teach their boys wisdom, justice, temperance, and courage,—wisdom including worship, justice including the duty of unswerving truthfulness through life, temperance including mastery over sensual temptations, courage including a free mind opposed to all things coupled with guilt."

II. From my point of view, the main features of the "so-called New Education" may be stated as follows: It is the name for something which has no existence, actual or probable; the movement had its origin in sentiment, and its strength lies in the fact of its vagueness; whenever this sentiment appears in any strength, it tends to destroy the school as it actually exists, but provides no definite substitute for it; it counsels a

violent revolution instead of an equable evolution ; it employs the language of exaggeration, and appeals to prejudices and narrow views ; it preaches absolute freedom and versatility, but it is dogmatic in its utterances and authoritative in its precepts ; it represents an impulse to abandon certain errors in practice, but rushes blindly into errors of an opposite sort, and so is in direct opposition to normal progress ; *per contra*, it summons public attention to educational questions, excites thought and discussion, stimulates the sluggish, forces the thoughtful to give a reason for the faith that is in them, and so is perhaps the cause of some actual progress, though in itself an indication of chronic unsoundness in the intellectual condition of the teaching profession ; it is better to move in this way than not to move at all ; but it falls almost infinitely short of an ideal mode of progress.

12. In what I have now read I have expressed a candid opinion of the "new education" as to its *raison d'être*. I do not know that any one will agree with me in my judgment ; but I claim the right to form and express an opinion on a question that is now exciting so much public attention. I may be wrong in the conclusions I have reached, but I have tried to state them so clearly that my errors will be promptly detected. "Next to being right in this world," says Huxley, "the best of all things is to be clearly and definitely wrong, because you will come out somewhere. If you go buzzing about between right and wrong, vibrating and fluctuating, you come out *no* where ; but if you are absolutely and thoroughly and persistently wrong, you must, some of these days, have the extreme good fortune of knocking your head against a post, and that sets you all right again."



13. New buds do not make a new tree. Each year adds something new to our education either in doctrine or in method, and each day brings to the thinker some revelation of truth; but these additions are all in the line of development or growth, they are perennial buds and blossoms proceeding from the secular trunk and branches.

14. After all, the common and solid ground on which we can all stand is the belief in continuous growth. For the present we differ in our conception of progress; but finally, let us hope, we shall all attain to the "unanimity of the wise."

15. Mr. Bain speaks of the "difficulty of reconciling the whole man with himself." This I believe to be the great problem of education which the future has to solve. The dominant purpose of Greek education was to form the man; but the education of the present day seems intent on the formation of the instrument. The real contest of to-day is between the partisans of a liberal education and the partisans of a technical or practical education. How may an individual become and continue to be an instrument, and at the same time approach more and more nearly the typical man? This reconciliation we might honestly call the "new education."

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### DISCUSSION.

Mr. John Kneeland, of Boston:—

I want to say first, that with five sixths or even eleven twelfths of the essay I am in entire accord; but I differ from the essayist in that part which represents what the new education, or what is called the "new education," is, and in the seemingly hopeless



statements in regard to the impossibility of getting at anything new. Where did this term, the "new education," come from? Where is the man who claims to have invented a "new education"? Who says he has discovered new principles? Who turns his back upon all that has been before, and stands forth as the discoverer of a "new education"?

I do not know where the term comes from, nor what it means; but I do know that there has been a new awakening in educational matters. There is a reaching back to get hold of the old principles to apply them in our teaching to-day. There is a searching for new and more effective methods. I do not understand that the essayist wishes to put himself in opposition to the new movement. But what is it to show that the old education brought out this or that principle, and suggest a sneer at the man who is advocating the same principle, because somebody else chooses to call it new? It so happens that I came into educational work in Horace Mann's day. I have upon my shelves "The Annals of Education," published a little before that time. I have read them, and I read the reports of Horace Mann as they were issued, and the "Common School Journal" that he edited as it appeared from month to month. I know what the teaching of that time was, and how earnestly a general reform was demanded. There was an educational revival. New methods were adopted, but they rested upon the same principles that are recognized to-day. Massachusetts was certainly awakened to the necessity of improving her methods of education, and with that awakening this very American Institute of Instruction, which is holding here its fifty-sixth annual session, had much to do.

Nine or ten years ago I was in the service of the Massachusetts Board of Education, and I probably visited about a thousand elementary schools. I was surprised to find that there was so much departure from the methods advocated in Horace Mann's time. For instance, he and other leading educational writers and speakers were as much opposed to the alphabetic method of learning to read, of attempting to get at the pronunciation of words by naming the letters of which they are composed, as perhaps any man at the present time. The word method of beginning reading had strong advocates. Yet in all the schools which I visited, there was not a single instance where the word method prevailed.

First, the letters were taught, and then came the formation of words in the old spelling-book way.

During this period of my school visiting, I attended a meeting of the Norfolk County Teachers' Association, and there for the first time met Col. Parker. He made a speech, and in his emphatic way denounced this alphabetic way of teaching as a wrong. He did not pretend to be uttering any new doctrine, nor, so far as I know, has he ever claimed to be the discoverer of new educational principles. It happened, however, that when placed at the head of the Quincy schools, he had more power than any superintendent I had ever before heard of possessed. My friend here, Mr. Philbrick, was at the head of the schools of Boston, but he was not permitted to go ahead and do just what he chose. The school committee did not say to him, You are an expert in educational matters; take these schools and manage them as you think best. But the school committee of Quincy did in effect say this to Col. Parker. He was free to take hold with the teachers and the children, and carry out his methods. It is a fact that he did change the methods of teaching in those schools, and the same change of methods has been brought about in other schools. I do not know whether my friend, Mr. Walton, has stepped out or not, but I think he could tell you whether in the thousand schools I have alluded to, he cannot find to-day other than the alphabetic method of teaching to read. In some hundreds of those schools, I know there have been many changes for the better.

I might name several points in the essay with which I find no fault whatever, excepting that the essayist seemed to give the impression that those who are advocating the methods of to-day take a different view. Take the matter of the history of education. The men who are most earnest in educational reform are most earnest students of educational history and educational systems. They are not unfamiliar with the ideas of Plato, Aristotle, Comenius, Pestalozzi, and other famous educational writers and workers. They do not claim to have discovered any new principles or any new faculties of the human mind; but they do claim that they are trying to adapt their methods of work to the needs and capacities of the children themselves. They say, study the children; know what you want to do with them and for them; adapt your teaching to the condition of their minds.

I think that the essayist, and all our educational men and women, ought to help on this work. They are not asked to array themselves under any man's leadership. I have alluded to Col. Parker as an able worker in this direction. But there are others who have been very influential in bringing about a better state of things. The lectures of Prof. G. Stanley Hall, in Boston, "Harvard Courses on Pedagogy," come to me as showing how high the tide of pedagogical thought had risen. Those lectures certainly helped on the new awakening. There is no time to name the many others working to the same end. Let us not put ourselves in any way in opposition to the earnest efforts of any true workers in the educational field. We can express our own thought and work in our own way. As for the term, "new education," I think we had better get rid of it; but let us hold to the new awakening, and be of those who have its spirit.

Mr. John D. Philbrick, of Massachusetts, said:—

MR. PRESIDENT,—My way of regarding the discourse to which we have listened is different from that of the gentleman who has just taken his seat. He hastens to place in the foreground of the debate certain imaginary faults of the discourse, assuming that the lecturer, in arguing that there can be no such thing as a new education, is at the same time trying to prove that there can be no improvement in education. And among the illustrations which he cites in support of his view of educational progress, two at least seem to me rather questionable; namely, the teaching the first steps in reading by the word method, and certain experiments made at Quincy. The lecturer sets out with a thesis relating to educational doctrine; this thesis is very important if true. The discourse is an attempt to establish this thesis by arguments. It is a piece of logical reasoning from beginning to end. It seems to me that the subject has been handled with masterly ability and great fairness. For one I accept the conclusions. It is now forty years, less one, since I first attended the meetings of this association, and I want to say, Mr. President, that although since that time I have heard many able lectures delivered before this body, I feel quite sure that I have never heard one that has afforded me so much satisfaction as the one to which we have just now listened. I congratulate myself on my good fortune in having had

the privilege of hearing it. One of the champions of the so-called "new education" tells us, in an elaborate article on the subject, that this "new education" was first developed into vigor in the great Northwest, and is now gradually finding its way eastward to New York and New England. Certainly no man in the Northwest has a better right to speak for that section of the country on educational topics than the lecturer, and behold this is the message which he brings us New-Englanders. It is a good message; sound, wise, wholesome. We owe him, and the section of the country which he represents, a debt of gratitude for it. I wish it might be printed and largely used for study in our Normal schools. For one I desire to stand up and be counted as a firm believer in the doctrines of that paper. If I might claim the attention of the audience for a few moments longer, I would refer to one of the details touched upon by my friend Kneeland, particularly because of its personal bearing. He says he visited a thousand schools at least while employed as agent of the State Board of Education, and that he did not find one where they were not teaching reading by the alphabetic method. At the period referred to, I had been for many years superintendent of the schools of Boston; and Mr. Kneeland's headquarters were at the State House in that city. One would naturally suppose that he could scarcely avoid looking into some of the primary schools of Boston. But the fact is that if he had inspected every one of the four or five hundred Boston primary schools, he would not have found in a single one of them the alphabet method of teaching reading; but he would have found a very rational phonic method everywhere in full and successful operation. Dr. Stanley Hall has been referred to just now by the gentleman who preceded me as a good authority, and as giving educational lectures in Boston. I think highly of Dr. Hall, and so I went to hear some of his Boston lectures. On this subject he gave it as his opinion that the shortest method of teaching reading was the best. I accept this doctrine, and would give it a wider application; but this being true, it follows that the word method pure and simple must yield in point of merit to the alphabetic method.

## IV.

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### THE PROVINCE OF SUPERVISION.

BY L. H. MARVEL.

THE trend of modern civilization is towards combined action in preference to individual effort. The man who can do many things fairly well sinks beneath the surface, while the man who can do any one thing very well is foremost in the struggle for existence. The general, in all cases, is subordinate to the special. This is true of every occupation and every profession. Early in the present century, hundreds of little shops were scattered along the roadside, all through the country towns of Eastern New England. In each of these shops one or two men were employed in making shoes. Coarse and rude as the production was, the goods were needed and found a ready market.

Cotton goods were manufactured in a manner equally crude; and print cloths were covered with figures stamped from blocks, an operation requiring no small amount of skill and manual dexterity. Watches were made by cunning artificers, who would expend months of the most careful and painstaking labor to produce perfectly every portion of an accurate and reliable time-keeper.

To-day the large shoe factories, where each workman makes but one part of the shoe, but does that part especially well, turn out goods of far better quality, each article representing the combined labor of a dozen workmen, and the expense is less than ever before.



The contrast, including increased excellence of goods and wonderful decrease in expense, is even more marked in the case of cotton goods and prints. While in the manufacture of timepieces, a Waltham watch, each part made by a special workman, rivalling the best of Swiss manufacture, can be produced at an expense so low as to render individual competition hopeless:

The result, in each case, is due to assembling large numbers of workmen, to a judicious division of labor, to the careful cultivation of specialties, and to constant, intelligent, efficient supervision.

In every large manufacturing establishment there is one man who must overlook everything, from the purchase of raw material, through every detail of the process of production, until the finished goods are placed upon the market. The successful manager, who can determine the quality of work in every department, instruct his subordinates, anticipate public demands, and furnish what the people desire a little in advance of the market, is the ideal head of organized labor.

In one of the most successful of New England corporations, the directors considered \$50,000 per annum, paid to the manager, the most economical expenditure that could be made.

The social forces which have effected the changes thus briefly indicated in manufacturing interests, have been no less potent in mercantile affairs, where the old-fashioned variety store is superseded by scores of special establishments; in agricultural pursuits, where dairy-farms, stock-farms, wheat-farms, market-gardens, etc., are working profitably and satisfactorily, while the general farming of our ancestors is an employment yielding but meagre returns. In the professions, the modern



tendency towards division into specialties is so marked that even a brief consideration of the several specialties is unnecessary. Scores of illustrations would occur upon a moment's reflection.

In all cases, we find that the result of the modern methods has been finer work, increased production, and diminished expense. If true economy consists in the production of the best articles at the lowest cost, that the widest distribution of comforts and luxuries may be effected, any intelligent, thoughtful man would scout the idea of abandoning the modern organization of labor in any department, and returning to the primitive methods of the preceding century, knowing that such a course could not fail to be ruinous.

Such radical changes in the development of our material interests are felt in every fibre of our social fabric. The rush towards cities, the strength of organizations, the influence of monopolies, all are indications of tendencies which, when rightly controlled, will benefit society by improving the condition of its individual members; but if not directed aright, are dangerous in the extreme, and may lead to individual corruption and to national ruin.

While such marked changes have been affecting all occupations and reorganizing our social life, the method of educating American children has passed through a transition period, corresponding wonderfully with the development of organized industries.

In order to institute a fair comparison between the schools of olden times and those of to-day, it is necessary to know what was accomplished then. The standard authority, "Barnard's Journal of Education" (Vol. XIII. p. 739), states that, —

"The time during which schools were taught in the rural districts — and such were most of them at the close of the Revolution — was from *eight* to *twelve* weeks, and that in the winter season. In the summer there were few, if any, schools, as all who could hoe a hill of corn, or do housework, were required to labor. At this early period, the attainments of those who had no further instruction than was received in the district school were limited to very few branches, the reasons for which are quite obvious; namely, the *inability of the teachers* on the one part, and the limited time of attendance allowed by the parents on the other. Spelling, reading, writing, and arithmetic as far as the rule of three, with simple interest, were the main branches. It was, however, thought by many parents unnecessary to have their daughters taught in arithmetic, as in their view it would be of little use to them. Fractions were out of the question."

Half a century later, we learn from a school report of one of Massachusetts most enterprising cities that there was "a disposition to omit the vulgar fractions," that in several districts "the study of geography was greatly neglected," coupled with this statement: "The schools are in better condition than they have ever before been within our knowledge." A visit to the schools maintained to-day, and a fair comparison of the results with those secured in times past, in accordance with the record presented, will show how utterly false are the premises of those who would turn back the wheels of time from twoscore years to a century to discover the model school." One more statement, by President Eliot, of Harvard (Inaugural Address, 1869), will conclude the testimony in favor of modern school work, and serve to illustrate the correctness of the position assumed: "The improvement of the schools has of late years permitted the college to advance the grade of its teaching, and adapt the methods of its later years

to *men* instead of to *boys*. This improvement of the college reacts upon the schools to their advantage, and this action and reaction will be continuous."

Similar testimony abounds respecting the superiority of city schools to those of country districts in recent years. In the "Fortieth Report of the Massachusetts Board of Education," Mr. Kneeland, one of the agents, reports that "the old district system prevails only in one or two of the towns I visited. In one, its peculiar disadvantages were plainly manifest. No town committee would tolerate such a school as one I saw there." Professor G. A. Walton, whose report on the Norfolk County schools awakened so much attention, says: "I count the district system, which still retains a hold upon many of the towns in this part of the State, to be the greatest hindrance to a uniform advancement of the schools. With no valid argument in its favor, the fruitful source of evil, and liable to that continually, it illustrates the almost sacred regard the people have for the opinions and interests of individuals. But for this, no authority for such a system could remain upon the statute book for a single year." Certainly the country district schools offer no advantages superior to those afforded by the modern city school systems. All testimony shows the opposite to be true.

Would time permit, we should be interested in tracing the development of the public school system, from its beginnings in the little district schoolhouse, poorly furnished, without black-boards, maps, globes, and apparatus, with the little shoe-shop near by. From such a school, where the children rushed recklessly in and out, where the teacher seldom "kept" but one term, where orderly conduct and studious habits were the exception

rather than the rule, we turn to the city schools of the present decade ; where hundreds of pupils daily assemble, and march, orderly as a regiment of soldiers, to and from the play-ground, and through the spacious halls of buildings as far superior to "the little red schoolhouse" as the shoe factory surpasses the shop in architectural appearance and in convenience.

Here one finds every appliance for instruction which thoughtful educators have devised ; and thoroughly educated teachers, directed by an efficient principal, teach five times as many weeks, yearly, as the old-time pedagogues kept school. Briefly, this is the change, in educational affairs, which the present century has witnessed.

A necessity for supervision, similar to that which arose in the occupations to which we have referred, is apparent in the management of public schools. Wherever the best supervision has been exercised, the most successful school work has been accomplished. This is the uniform testimony of all experts who have been authorized to inspect public school work.

It goes without saying, that the supervision of schools should be intrusted to competent educators only. But the sharp distinction between educated men and educators is not always clearly drawn. It is safe to assert that no man should be elected superintendent of schools who is not sufficiently familiar with the details of school work to teach thoroughly and well any of the classes under his supervision. This demands a competent and experienced teacher. No person who lacks successful experience as a teacher should be appointed superintendent of schools.

Having considered the changes in customs and

habits of the people which have caused the schools to require efficient supervision, and having noted briefly that the superintendent should be a professional teacher, it remains to indicate some of the duties and requirements of the office.

*First.* A practical knowledge of the theory of teaching and of the different methods of instruction, of the mental ability of children, of the peculiarities of the particular locality where his work is to be performed, must guide the superintendent in formulating a general plan of instruction sufficiently clear and definite that his teachers may be enabled to work harmoniously in the several grades, and sufficiently flexible that, while securing general uniformity in advancement, the individuality of the pupils will not be lost. It is of vital importance that each child shall be trained to make the most of his opportunities, not only in school, but throughout life; so the whole plan of education must be designed to secure the highest development of the intellect and character of the individual, with special reference to the practical needs of after life.

*Second.* Equally important in the work of supervision is the selection of teachers. There is a certain indefinable quality which marks the good teacher. Without being able to tell why or how, the expert educator will determine that this person will be successful, and that person will fail, in a given school, with a certainty as unerring as that of a United States treasury expert, who rapidly manipulates piles of bank-notes with nimble fingers, occasionally casting out spurious bills with apparent carelessness and unconcern, but without hesitation or mistake. No phase of supervision is of greater importance than that which recognizes the super-



intendent as the acknowledged judge of the fitness of teachers for the several schools. Failure to assign suitable teachers to positions where their work will be of the most service will weaken the school system, while success in this direction will necessarily lead to success in all departments, and will enable the schools to accomplish the best work possible. The efficiency and value of supervision is nowhere more clearly manifest than in the selection and assignment of teachers.

*Third.* Thorough supervision demands the careful training and constant assistance and support of inexperienced teachers. Counsel, advice, illustration of methods, at the commencement of a teacher's work, are often of inestimable value, and the strength of a superintendent, when most needed, may support and sustain a school and a teacher, that, without assistance at a critical period, would have failed to secure satisfactory results.

*Fourth.* Inspection and examination of the schools occupy a large portion of the superintendent's time, and the result of this work must determine largely the usefulness of the officer. Frequent calls at the several school-rooms show where assistance and direction are most needed, and finally indicate whether the result of the work of the teacher and of the class is satisfactory. Formal written examinations are of some value in determining the proficiency of pupils. When properly conducted, they occupy no longer time than the class ordinarily give to a subject each day, in fact, take the place of an ordinary written lesson, and are not recognized by the class as a special test, and dreaded as such; they cover only the work which is required in daily recitations, and are arranged to learn what the



pupils know, not to puzzle, trip, or confuse them. The best result of such examinations is the opportunity for the preparation of questions sufficiently broad to test the pupil's knowledge of the subject, rather than of the text-book; and the examiners who thus encourage instructors to teach principles and topics instead of text, by making questions which tax the judgment rather than the memory, offer the strongest incentive for the encouragement of teaching in preference to cramming, and conserve the highest interests of the best teachers and the best schools.

*Fifth.* The constant demands for instruction in subjects not recognized in the ordinary curriculum of public schools, and the frequent attempts to foist new and unusual methods of instruction upon the teachers, require a nicely balanced judgment and a keen discrimination to avoid dangerous errors. A thorough knowledge of the history of education, and familiar acquaintance with the work of education, are requisite to enable one to sift the chaff from the wheat, and to escape both the Scylla of radicalism and the Charybdis of conservatism. Many of the best modern methods of education were primarily suggested by competent superintendents, and have been carefully worked out under their direction by experienced teachers, while the foolish visionary schemes which have been checked by wise supervision would afford material for a volume of educational history, to which every superintendent could furnish an interesting chapter.

In addition to the phases of purely professional work just enumerated, the superintendent should be thoroughly familiar with the expenditures required by his department, and frequently must assist the committee to form their estimates of the financial needs of the schools.

How to conserve the best interests of public education, without imposing unreasonable burdens upon an over-taxed municipality, is a problem more difficult for the superintendent to solve than the old-time "dial," "grindstone," and "haystack" problems which used to dispute the palm with the shoemaker's counterfeit bill, and the "hunter and squirrel."

Again, one of the most perplexing duties which devolve upon a superintendent is the settlement of difficulties between teachers, pupils, and parents. An intimate acquaintance with the dispositions and characters of teachers and pupils, a thorough knowledge of human nature, an unflinching determination to deal justly in all cases, are necessary for the satisfactory performance of this most delicate work, which exhausts the vitality and tries the patience of every conscientious officer more than any other task which he is called upon to perform. The time allotted for this address will not permit a complete enumeration of all the minute details of a superintendent's work; it is sufficient to state that his oversight must extend from the most trivial matters, such as the purchase of pencil and paper, to the consideration of the most complicated questions concerning courses of study, methods of instruction, and means of discipline.

In closing, a brief recapitulation of some important statements may present the subject more clearly.

The social forces which have attracted families to cities, and by massing labor have required supervision of industries, have centralized a large portion of our school population, and rendered supervision of schools essential to satisfactory management. The superintendent should be a teacher of successful experience,

since professional work can best be appreciated and directed by members of the profession.

Supervision is of value to pupils, because it arranges a course of instruction for them in accordance with natural laws of development, and by constant care and inspection insures the employment of approved methods of instruction, to the end that each individual pupil shall be educated to become an intelligent and good member of society.

Supervision is of assistance to teachers, because it fully appreciates the excellence of thorough professional work, co-operates in all plans for the advancement of the profession, overlooks and strengthens the daily work of each individual teacher in a corps of instructors.

To the public, in addition to formal reports at stated periods, supervision affords an ever-ready means of communicating information concerning all the details of school work.

To direct wisely and well the education of millions of children, who are the pride and hope of the homes of our broad land, is the province of school supervision. No more important trust has been committed to any public office; and the faithfulness and efficiency with which its duties are performed will determine to a great extent the social and intellectual character of succeeding generations.

## V.

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### CIVIL-SERVICE REFORM AS APPLIED TO TEACHING.

BY THOMAS W. BICKNELL, BOSTON, MASS.

THE teachers of the United States are not a "feeble folk" either in numbers or in attainments. By the report of General Eaton, United States Commissioner of Education, under date of 1882-3, 293,294 persons were employed in teaching public schools in our States and Territories during the school year. Of this number, 115,681 were men and 177,613 were women. If we add to these large figures the teachers of music, who number 30,477, and the teachers in colleges, scientific schools, and all other private or endowed institutions and schools, estimated at not less than 65,000, we have, at the lowest estimate, 388,771 in our country whose chief business is the instruction of our school population of 16,000,000 of children and youth.

As compared with the so-called learned professions, the teaching fraternity outnumbers them all in a ratio of nearly two to one, as appears by the following figures:—

Lawyers . . . .	64,137	M. 64,062	F. 75
Doctors . . . .	85,671	83,239	2,432
Clergymen . . . .	64,698	64,533	155
	<u>214,506</u>	<u>211,834</u>	<u>2,672</u>

If, as is estimated, the public schools of the country have an average duration of twenty-four weeks or six months, the teacher's profession is annually rendering

to the public service 146,647 solid years of labor, for which it receives as a recompense \$57,804,397, or an average of \$400 per capita, per annum.

In this estimate, as to numbers, service, etc., we have not included normal-school teachers, superintendents, and other school officers, who are important factors in the public service, and whose relative value to the whole work is most necessary and vital. When we remember, therefore, that our topic relates to the interests of nearly half a million of persons, who in one capacity or another are helping to educate our American youth, and thereby to give prosperity, strength, and perpetuity to our institutions, we may well stay to inquire as to our status, and how it may be made more permanent as to our work, and how it may be made more efficient.

Teaching in its nature, and by virtue of the magnitude of the interests involved, belongs among the learned professions. Four hundred years ago, in Italy, France, Germany, and even in England, it was worthily classed with law, theology, and medicine; and the teachers of Padua, Florence, Vienna, Berlin, and Paris stood as high as those of other distinguished callings. In America, however, while the schoolmaster came in with our earliest immigrations, and has had his honorable part and place in our new civilization, he has lost something of the class rank of the Middle Ages, even though he may have increased amazingly in progeny and in influence. In fact, the very increase of our statistical standing has decreased our personal dignity and associated capacity.

Ezekiel Cheever, in Boston, and Philemon Purmont, in Providence, shine forth as stars of the first magni-

tude in the intellectual firmament of early New England. The habitual reverence paid to their personal worth and their official importance is sufficient evidence that they lived above the world, while in it. Their life tenure was never questioned. Long pastorates and schoolmasterships were the fit accompaniments of the long-lived family doctor and the village squire. If Goldsmith be accepted as authority, we may well believe that he outranked the parson of the earlier times:—

“In arguing, too, the parson owned his skill,  
For, e'en though vanquished, he could argue still,  
While words of learned length and thundering sound  
Amazed the gazing rustics ranged around;  
And still they gazed, and still the wonder grew,  
How one small head could carry all he knew.”

But past is all his fame.

Why the teachers of our day may not be entitled to the dignity of professional workers arises mainly from three causes:—

1. Brief and inadequate preparation for teaching.
2. The lack of the element of enthusiasm, which is the source of a professional *esprit de corps*; and
3. The short tenure of office of the average American teacher.

Now, it is not chiefly our purpose to show how we may attain to the position of honor of our friends of the learned guilds, but the rather to inquire how we may compass the good things secured by them, namely, learning, professional zeal, and permanency of service, with the good hope that all other things shall be added unto us. The sign and the thing signified are not divorced in the thoughts of men.



Let us ask, then, what we may learn as a body of teachers, jealous of our rights and zealous in our calling, from the civil service, of which we hear so much in the political world ; what are the principles, and their significance to the teachers, and what benefits may flow to us from their application to our work.

Over one hundred and twenty thousand persons are now employed in the civil service of the United States, about one fourth the number engaged in the educational work of the country. Of the enrolled force, 4,930 of these persons are directly appointed by the President, "by and with the advice of the Senate." The secretaries and heads of executive departments usually select their immediate subordinates, who are theoretically entitled to serve "during good behavior." There remain, after deducting all of these special appointees, nearly ninety thousand office-holders, servants of the government, whose fitness for their positions has in the more recent history of our public affairs been determined by party fealty, rather than by administrative capacity or personal ability. It is to the credit of the founders of our Federal system that they placed a true estimate on the business of the government as demanding as great and as varied ability as banking and mercantile affairs. As was declared by a justice of our Supreme Court, "No people can have a higher public interest, except their liberties, than integrity in the administration of their government." During the eight years of Washington's administration, there were only nine removals, and all for cause. John Adams made only nine removals, no one of which was for a difference of politics. Mr. Jefferson removed thirty-nine office-holders ; Madison, during eight years, made five

removals; Mr. Monroe, during eight years, made nine; and Mr. John Quincy Adams, during four years, made but four. "To the victors belong the spoils," was the political war-cry of General Jackson and his followers on their accession to power in 1829. "A hostile party" must be punished, and the enemies of the administration must be displaced and the vacancies filled by partisans. "Rotation in office" turned out five hundred postmasters alone during the first year of Jackson's Presidency; and the practice thus begun has since been followed by all parties in all elections, great and small, national and local. Party friendship became the determining quality for public office, and heated partisanship was rewarded by the fattest spoils of office. Mr. Calhoun, as early as 1838, championed a movement to separate office from politics, by placing the office-holder beyond the reach of the executive power.

Von Holst, speaking of Calhoun's remedy for the evil of the spoils system, said: "If he had changed but one word, if he had said *party in power* instead of *executive power*, this advice would have been the egg of Columbus."

From Jackson's day till 1860 and later, the vicious doctrine ruled in all our State and national governments, the incoming party sending the outgoing with all its appointments on an exploring expedition to seek out the head-waters of the political Salt River. To Rhode Island belongs the high honor of sending to the lower house of our national Congress an eminent lawyer and statesman, Thomas A. Jenckes, of Providence, who saw clearly the corrupt practices of government in the matter of patronage, whose independent judgment enabled him to rise above personal or party con-

siderations, and whose eminent ability secured for him the attention of Congress and the people, in the discussion of a civil service which should be founded on intelligence and ability, the value of which would give permanency to the skilled service, and the highest rewards to the most meritorious career. To Mr. Jenckes is due the credit of having gained the highest victory of his life in the hour of his defeat, and of inaugurating a civil reform which, in its far-reaching benefits, has no parallel in the history of our national legislation.

If we have in mind a few of the worst consequences of the old system, we shall be able to more readily and fairly estimate the appropriateness and practical effects of the new. They were these : —

1. A virtual repudiation of the moral and legal duty of the appointing power to select the most meritorious applicant, and consequently an unjust and despotic denial of the paramount claims of the most worthy.

2. The substitution of superior backing for superior merit, as the basis of appointments, seriously impaired the independence essential to the constitutional responsibility of executive officers for the proper execution of the laws.

3. Members of Congress, pursued alike by the importunate appeals of those seeking office as a charity, and by the clamor and threats of those demanding it as a reward for partisan work, were no longer independent. They were almost forced to devote to office-seeking the time needed for legislation, and to foist incompetent supernumeraries upon the public treasury, which it was their special duty to protect.

4. Despite the large proportion of competent and

meritorious persons who find entrance, the bringing in of so many of the political office-begging and office-earning class tended to lower the public service in the estimation of the people, and to obstruct the work of Congress.

5. Such a system caused the people to overlook the important distinction between elective officers and the constitutional advisers of the President, on the one hand, who represent and must deal with political opinions and local interests, and the purely administrative subordinates on the other, who, representing neither opinions nor interests, should do their work in the same manner, irrespective of political or religious opinions, whatever party may be in power.

6. The system which thus made party patronage of clerkships at Washington, also made patronage of the subordinate places in the customs offices and in the larger post-offices, the heads of which are subject to confirmation by the Senate. Selections for these places were dictated by the same influence which controlled nominations. The power of confirmation was thus made a dangerous political force in the States and in the elections, tending alike to impair the counterpoise between members of the two houses of Congress, and between Federal and State authority.

On Jan. 16, 1883, the Civil-Service Reform Act of the United States was approved and signed by Chester A. Arthur, President of the United States.

Its ultimate purpose is plainly declared in its title, which is "An act to regulate and improve the civil service of the United States." But, subordinate to that end, several results may be attained which, both in the law and in the rules, appear to be the more direct objects of their provisions.

1. Official authority and influence must no longer be used to impair the freedom of elections, or to coerce the political action of citizens.

2. Extortion from those in the public service, whether under the form of political assessments or otherwise, for the purpose of paying the expenses of parties or candidates, must come to an end.

3. Selections for the executive service on the basis of official favor and partisan influence must be suppressed, by requiring examinations and other adequate tests of character and capacity as the conditions of entering this service.

4. The true responsibility and independence of the legislative and executive department under the Constitution must be restored and preserved.

The first principle of civil service is that the government has a right to the best services of its best citizens. The ruler is the servant of the people. Wisdom in the ruler insures security, prosperity, and contentment in the ruled. Solomon had the philosophy of good government and a true civil service in mind when he said, "When the righteous are in authority, the people rejoice, but when a wicked man beareth rule, the people sigh."

But while civil government has to do with the right ordering of the affairs of the citizens or people, education is engaged in making the people themselves. If there be need of able, wise, and efficient men to bear rule, and to attend to the complicated duties of civil society, so much the greater need is there of wisdom, strength, and executive force in those who are laying its foundations. The care of St. Paul's in London may be committed to honest vergers, but no less an architect



than Sir Christopher Wren planted its columns and shaped its lofty dome. Xenophon tells us that at one time the Persian princes had for their teachers the four best men in the kingdom,—the wisest man to teach wisdom, the bravest to teach courage, the most temperate to teach self-control, and the most just to train the moral nature. We shall all agree without argument that the teacher of a nation of freemen, and the guide of citizens, should be possessed of the wisdom, the bravery, the temperance, and the justice of a higher character than those who teach princes or rule states.

The second principle of the civil service is that competitive examinations must be conducted to determine the qualifications of the candidates for the various offices. Here the Darwinian law of natural selection does not apply, for the man is more likely to seek the office than the office the man. The methods are various by which the fittest shall be found, whose survival must ultimately depend upon their fitness. Mr. Mill, in his work on representative government, lays down the true theory that should control in the filling of public offices: "A most important principle of good government in a popular constitution is that no executive functionaries should be appointed by popular elections, neither by the votes of the people themselves, nor by those of their representatives. The entire business of government is skilled employment; the qualifications for the discharge of it are of that special and professional kind which cannot be properly judged of except by persons who have themselves some share of those qualifications or some practical experience of them."

Acting on the wisdom of this first principle of political economy, that government is worthy only as its



officers are capable and efficient, the British Parliament, in 1855, after two years of debate, adopted the civil-service policy, having in view, —

I. To provide by a proper system of examinations for the supply of the public service with a thoroughly efficient class of men.

II. To encourage industry and foster merit by teaching all public servants to look forward to promotion according to their deserts, and to expect the highest prizes in the service, if they can qualify themselves.

III. The rate of remuneration to be paid in the higher division of service should be such as would attract men of a liberal education who would otherwise go into the open professions. The possible prizes would, of course, be much smaller than those attainable outside the service; but the credit of serving the government, the character of permanency, prospect of pension, and other advantages which attain in the civil service of the Crown, would be by many regarded as a sufficient inducement.

Let us look at the *modus operandi* of the examinations of our civil service. The President of the United States appoints three commissioners of civil service, who are Dorman B. Eaton, John M. Gregory, and Leroy D. Thoman. This board, which has in charge the execution of the laws relating to the civil service, appoints a chief examiner, departmental examiners, special examiners for the various offices, such as the patent, pension, army, signal, topography, etc., and examining boards at custom-houses and post-offices in the leading cities of the country. The competitive examination is the vital element of the system, and the most important and exacting duties of the commission are connected

with the examinations and other tests of character and capacity for which the act provides, and which, subject to the rules, it places in charge of the commission.

To General Grant, while President of the United States, is due the honor of having inaugurated a plan for competitive examinations between 1872 and 1875. They were conducted, however, under various embarrassments, the chief of which was that members of Congress were exceedingly unwilling to surrender the control of the patronage of the local offices within their districts. Prior to this time a system of pass examinations had been in vogue in this country and in England. By this plan, senators and representatives nominated certain persons for examination in America, as in England members of Parliament, lords, bishops, and great politicians issued passes or tickets of admission to the examining boards. These examinations served to exclude the dunces of those nominated, but in no sense decreased the evils of the old political monopoly.

The essential vices of the pass examination system were these:—

1. The examinations were not open to all persons apparently qualified, nor even to all persons belonging to the dominant party, but rather to such of the favorites of the dominant faction of that party as members of Congress and great politicians recommended.

Though the more disinterested and patriotic of those who monopolized patronage brought large numbers into the service who were both capable and worthy, the tendency was strong in favor of the office-begging and office-earning classes.

2. The tenure of the members of the examining boards was too precarious for strong resistance to influ-

ence and solicitation, but it should be said to their credit that they sometimes defeated the great officers and politicians who tried to push their favorites past the examinations.

3. These pass examinations denied the government a choice from among the most meritorious applicants. There was no competition or comparison of merits between them, but only the chance of taking a person examined separately, on peril of offending his backers by refusing him.

It was thus inevitable that one of the chief objects of the civil-service acts and rules should be the re-establishment of the system of free, open, competitive examinations.

It is clear, therefore, that the main purpose of the act is to establish a system of examinations for ascertaining the fitness of the applicants for doing the public work, and not for mere purposes of examination. The new system is to take the place of that vast machinery of patronage, largely based on official favor and social and political influence, which, though materially curtailed in recent years, has long been the most effective means of entering the executive service. In other words, a merit system of office is substituted for a spoils system.

Several important facts relating to the competitive examinations may be briefly stated as follows:—

(1.) They are open to all persons of merit, men and women alike, unless some important part of the work is better adapted to the one than to the other sex.

(2.) The examinations are both oral and written.

(3.) They are general and special, from that of the copyist to that of science, language, law, politics, art.

(4.) The examinations are elementary in character. The highest mark is 100, the lowest 65.

(5.) An applicant for position, who passes the general examination, is worthy of promotion without further examination.

(6.) Selections for the service are based entirely on the record of the examined, and not on any personal influence of any sort whatever.

(7.) A probationary period of six months precedes a permanent appointment.

Mr. Dorman B. Eaton, in the July *North American Review*, states that 11,000 persons have been examined at 225 examinations held in all parts of the Union. Of the 6,347 persons examined in 1884, 5,525 were males and 822 females, and that two thirds have been found competent, the appointees being equally divided between the two parties.

Mr. Eaton, in commenting on some special effects and conditions of the new system, says: "The theory of its enemies that it would fill the service with mere boys and girls, finds its answer in the fact that the average age of all those examined has been thirty years, thus showing an average period of nearly fourteen years of practical life between leaving the schools and entering office. The prediction that college-bred men would monopolize appointments is answered by the fact that of 5,556 applicants as to whom the record is complete, their education was as follows: 3,920 only in common schools; 1,096 in part in high schools or academies; 91 in part in business colleges; 449 in part in colleges. More than seventy per cent, therefore, had only a public-school education. This friendly relation between the merit system and the public-school

system will greatly strengthen both. In no way can a nation do more to advance the dignity and success of the public schools of the people than by making excellence in the good character they develop, and the studies they teach, the tests for the honor of holding its offices and enjoying its salaries. The youth of the country will be quick to see that the new system makes character and attainments more effective than partisan activity or flunkysism for securing appointments. It will be impossible for politicians to ridicule successfully the schoolmaster's test, or to make that of the patronage-monger or the politician appear more reputable. It will never be possible to justify the taxing of all the people to educate all the children, and then to deny that superior excellence in that education is an irrelevant test for office. How effective the tests of the merit system are in securing practical men for the public work is shown in the facts given in that report, that of the 109 in the departments at Washington who served their six months' probation, 107 had won permanent appointments; and that, of the more than 500 appointments under the rules there, only three were removed in a whole year."

"At the end of the first year, President Arthur, in a message, declared the good results-foreshadowed to have been more than realized. 'The system has fully answered the expectations of its friends in securing competent and faithful public servants, and protecting officials from personal importunity.' In his message of January last, expressing, as he declared, the views of every member of his Cabinet, he 'congratulated the country upon the success of the labors of the commission.' Accepting this view, Congress voted an increase



of its clerical force. A committee of the last Congress, composed of eight Democrats and five Republicans, made a unanimous report, in which it declared itself 'entirely satisfied with the thorough, conscientious, and non-partisan work' of the commission, and declared that 'the continuance of its work will in a large degree tend to eradicate the evils in the civil service of the government.' The last report of the commission sets forth in great detail the results of its work, and this report it sends to those who request it. The new administration appoints those certified by the commission, irrespective of their political opinions.'"

School-teaching in our public schools and State colleges is a public service, and demands the highest capacity and the most complete scholastic qualifications. There are three conditions which must be met before the highest capacity and the most complete professional quality can be secured. The first is permanency in the tenure of office; the second is a proper reward for services, adjusted not only by the law of supply and demand, but by the responsibility of the situation, the work to be performed, and the time and expense for personal preparation; and the third is the establishment of proper tests by which the qualified shall be accepted and the unqualified rejected. As a matter of fact, the third condition determines and precedes the first two, for excellent qualifications as a rule are rewarded with the best pay and longest service.

In an address delivered before this Institute in 1878, I offered the five following propositions for consideration, and later the Institute made them their own by unanimous adoption:—



*Proposition I.* All instructors charged with the education of children and youth should be selected on the ground of especial talents, professional training, and aptness to teach.

*Proposition II.* Such teachers should possess certificates of qualifications entitling them to teach in town, county, or State, for at least three years, when these shall be exchanged for life certificates, founded on a basis of talent, training, and experience.

*Proposition III.* Teachers possessing life certificates should hold an advisory relation to local officials, in regard to gradation, courses of study, promotions, general policy, and scope of school *régime*.

*Proposition IV.* The county and State examiners should be selected on account of special fitness as educational experts, and possessing large experience as practical educators; should possess the power of examining candidates and granting provisional and life certificates.

*Proposition V.* The school supervision of all grades should be in the hands of men and women whose experience has been gained in the school-room; who have made education a special study with reference to its philosophy, means, and ends.

In these you will notice the conditions of professional position analogous with those of the civil-service rules, and the traditional rules for entrance into any one of the so-called learned professions.

We have, first, skilled examiners, who guard the doors by test examinations, which are the proper evidences of general and professional knowledge. The judges of qualifications should be either men or women of excellent qualifications in themselves. They should be im-

partial, and should stand for the best interests of the children rather than the personal interests of the applicant. The higher the standard of attainments, the higher will be the ambition of the applicants. Since the establishment of the supervisors' examination in Boston, the scholarship of applicants has increased more than twenty-five per cent.

Each of the professions, as is the civil service, is protected by entrance examinations. Proper standards are fixed in law and tradition by which the qualifications of candidates for admission are determined. Competent examiners are selected, who shall apply these tests in a judicious manner, and thereby determine the status of the applicant as related to the proposed profession, and judge of his fitness or unfitness therefor. All this is necessary to preserve the dignity and integrity of the rank of the profession, and the profession is most honored when its standards for admission are wisely adjusted to the demands of society, are conscientiously maintained, and the laws as to acceptance or rejection rigidly and impartially enforced. Society attaches its highest honors to the worthiest competitions for professional skill, and if the standards for the positions of honor and trust are so high as to exclude the unworthy, and to invite the best ambitions of the worthy, they most nearly accomplish their high ends.

The work of teaching has no exceptions to rules applying to other public service, and the same safeguards must be established here as elsewhere; the same protection must be guaranteed to those who are worthily within the profession, and the same warnings must be set up to those who would steal its bounties as camp-followers. If I judge correctly, the weak side of our

guild is the low estimate put upon the service, and the low standards set up for admission to it. As with the marriage laws of Connecticut years ago, a clergyman once said that the only qualification needed in that State was the ability to jump over a broomstick, without reference to its height from the ground; so in respect to teaching, the barrier has often been as light as a broomstick, and that only a short distance from the ground.

Now if I mistake not, teachers, well qualified teachers, have a growing disrespect for professional examinations, and if so, for a reason. In the first place, the examiners are not educators, seldom teachers, oftener men and women who slightly comprehend the real condition and needs of the schools, and know not how to discover professional merit. Of what worth would a professional diploma for the practice of law or medicine be worth, if conferred by Jedidiah Jenkins of Bozrah, farmer, Solomon Smith, tavern-keeper, and Mehitable Mulligan, seamstress. What awful grandeur might surround the court of judgment, but what awful littleness would attach to its findings. Is it not safe to say that three fourths of those who have now in their hands the examining and conferring of degrees upon men and women as teachers are utterly unfitted for such a work? Under the examinations of large bodies of our school boards, the duties of questioning are "more honored in the breach than in the observance," and their intuitive knowledge of physiognomy and mind-reading stand them better in hand than their knowledge of educational methods and the principles of mental growth. And to affirm this is no reflection upon the good men and women who are willing to serve on our school boards. They may be the best the community affords,

but they are not good enough to pass judgment on the most important concerns in which, as a whole, society is interested. The farce of an examination would be made ridiculously apparent, if these persons were called upon to examine the minister to be settled over the parish church, or the doctor who treats the parish ills. But few of our States, and not one of our New England Commonwealths, has made any adequate provision for the certificating of teachers as is done across the Atlantic, in England, France, and Germany. In my judgment, no one thing needs to be done so much as to reform the *personnel* of our examining boards, and I will indicate briefly what I believe to be the change that is in the main demanded.

1. A State Board of Education in each State, with the State superintendent as its secretary.

2. The Board of Education of each State should be made State examiners, with power to appoint such assistants as they might need to aid in the details of the examining work.

3. Annual examinations of new candidates, to be held under the direction of the State Board and its secretary, the questions to be prepared by the board, and the standard of qualifications by it.

4. State certificates should be granted, entitling those certificated to teach in such grades of school as are indicated by the certificate, in any part of the State. The diploma of any State normal school shall be accepted in lieu of a certificate of an examining board.

5. These certificates should be good for three years, to be substituted for a life certificate, without examination, at the close of the three years of successful service as a public school teacher. By this plan, we adopt the

principles and enter into a uniform course of action with the civil service.

6. Interstate comity to be recognized, so that certificates granted in one State will be accepted in another, after an indorsement by the board of examiners.

By such a system of examinations, another reason for popular distrust of present methods would be removed, namely, the character of the examiners themselves. The skilled questioner alone knows how to discern the skilled applicant. The teacher of the public schools of New England asks to be examined on something besides the technicalities of arithmetic, reading, and grammar. These are only the alphabet of teaching. Its language is found in the methods which hold, and the principles involved in the teaching. Our States establish normal schools, and they give to a large body of instructors the best theories and the best practical skill for the school-room. We need to have the examinations such as will be respected by these professionally taught, as well as by those who, by other agencies, come to an intelligent understanding of the work of teaching. "A good school," says President Eliot, "is a man or woman." To find the man or woman is the work of the examiner. Good judges and experts by skilful questions pierce the outer husk of knowledge, and find the real wheat concealed beneath. Educated power is what the teacher wants, and the dry details of an ordinary examination are insufficient evidences of real teaching power. The mere technique is nothing; the life and the soul of instruction are all. "It will be a sorry day for the development of American life," says Superintendent Hancock, "when school authorities come to consider organization and method in our school



system, however perfect, a substitute for brains and character in the educator, or to look upon mechanic as the equal of dynamic teaching."

The two points already referred to, natural fitness and ability for service, and proper examinations as a test for thorough qualifications, lead naturally to the most important principles involved, namely, that of permanency in office. A theoretical civil service lays the axe at the root of favoritism, nepotism, and spoils, and in its place plants the vigorous and healthy tree of independency and character which takes a deep and permanent hold on the best soils in the individual and in society. The real objects of the whole work hitherto referred to has been to find the best men and women in society, and to confer upon them such a tenure of office as will cause them to feel at ease in the positions to which they may be called, and to do their best when installed. In the public service which is dependent on personal appointment, the appointee's official life is measured by that of his patron, and the temptation is to make the most of one's position for personal gain or aggrandizement, knowing that sooner or later the political headsman's axe will gracefully perform its work. It is individual service in a large measure, the obligations of the servants being equally divided between his benefactor and the State. Under the true civil service, the office-holder holds allegiance only to the public, through its proper agencies; and as the State lives forever, so does the office and its holder, the latter at least as long as faithful and efficient service can be rendered. When Disraeli surrendered the government of England to the Gladstone Cabinet in 1881, the only changes that occurred were in the ministry and their personal clerk-



ships. The same was true of the recent change in the government of England, when the Marquis of Salisbury was called upon to succeed Mr. Gladstone. The only change may be in the policy of the administration as affected by the opinions of the new ministry, and not in the great army of English office-holders. These well-qualified men and women remain at their posts of duty, whatever the political changes in great parties, and whatever the condition of public sentiment on great national questions. Each is supposed to have perfect freedom as to opinion on home rule in Ireland, the threatened war over the Afghanistan frontier, or the retreat from the Soudan. These personal relations and opinions of the government employees may be freely expressed by voice and vote, and yet the position remains and the individual's independence is secure.

In our own land, under an administration which claims for itself the full recognition of the principles of civil service, we cannot claim to have reached the full fruition of the blessings of a well-established service, although we are feeling after, if haply we may find, its full exemplification. Under the patriotic cry of "Turn the rascals out," we are led sometimes to suspect that its full meaning is, "Turn the rascals out, and put the friends of the administration in," whatever the administration may be. One thing is true of the present administration and of Mr. Cleveland as its head, that never before has such an opportunity come to any ruler to administer civil-service laws and principles wisely, firmly, and impartially; never before has the temptation to resist such a policy been so strong on the part of the dominant party; and never was the chief executive so much in need of the honest and impartial support and

influence of educators to aid in the administration of a policy which he has so frequently and manfully espoused. Whatever may be the outcome, however, this nation is marching on, through all the distractions of the hour, to a settled policy to place, in the offices of trust as well as honor, only those who are competent for the service, and then to give them such leases as will insure for them a tenure at once honorable and permanent.

I dare say that many of you will regard this element of permanency as the most important in the application of civil service, and may think that at last the missing link has been found which connects our occupation with a profession, or rather that a bridge has been constructed over which the transient and the itinerant may be transported to the regions where change and chance never invade. Let not your hopes be raised too high, lest disappointment speedily bring them to the dust, for there is a large class of teachers, filling the great body of our ungraded schools, and some of the graded schools too, who do not enter upon teaching as a permanent work, and who have no ambitions beyond present and temporary employment. Teaching is a sort of summer holiday, and before meridian is reached, a cloud no larger, in fact about the size of a man's hand appears, and lo, the cloud fills and makes, not obscures, all the future heavens of that teacher's life. The transient teacher then enters upon the permanent work of the home, and in furnishing material for other teachers of a later formation. In fact, so long as the great majority of American teachers are women, we may confidently and hopefully predict that a long tenure will not apply to their teaching lives. Thirty years ago, Horace

Mann calculated that the average tenure of teachers was about four years, and it is not probable that that average has rapidly increased since his time, from the fact that the ratio of men to women teachers has been inverted, and that almost four fifths of those teaching in our country schools are women. In New Jersey, where statistics have reached their maximum value, the following was reported for the year ending Aug. 31, 1882 :—

Number of teachers who had been in the same school one year or less, 1,063; one to five years, 1,302; five to ten years, 635; ten to fifteen years, 253; fifteen to twenty years, 96; over twenty-five years, 22. Average time for teachers throughout the State, three years and nine months. Average time for teachers in cities, six years and six months.

In New Hampshire, the home of our president, to whose schools he is giving a most earnest and self-sacrificing service, he reports that for the year ending June, 1883, the number of teachers having had no previous experience as 569, and the number reported as teaching in one school two consecutive terms was 1,421, in a total of teachers, 477 men and 3,117 women. In California, where, if anywhere in this country, the paradise of our profession is supposed to have been found, only 584 districts were reported as employing the same teachers more than one year, and that State employs 3,777 teachers. In West Virginia, out of 3,045 teachers employed, 1,115 had taught the same school two or more terms previously; 640 reported the present year (1883) as their first in teaching work.

Probably the most productive agency in this matter of short service is the brevity of the average school

year in our States, which in cities is usually forty weeks, but in the country is often half that period. As a matter of fact, the school year averages from 199 days in Maryland to sixty-two and one half in another State.

In three of the six New England States the average year is more than five months, in five of the six Middle Atlantic States, in three of the nine Northern Central States, in one of the two Pacific Slope States, and it is only a little over three months in all of the other States of the sections named. On the other hand, the school year is less than three months in all the South Atlantic States, in two of the four Gulf States, in one of the six Southern Central States, and does not equal four months in any one of the States last named. An occupation that employs its laborers only twelve weeks out of the fifty-two must pay them fabulous wages during that period to attract them to it. But how is the matter of salaries as related to tenure. Mr. Von Coln, late State superintendent of Iowa, calls attention to the fact that the pay (call it not salary) of teachers of ungraded schools in his State does not average above \$150 per annum, whereas a common laborer receives \$200 a year and board, is not expected to dress well, and has no examination or Institute fees, and is not expected to subscribe and pay for the "Journal of Education," or attend the American Institute of Instruction and pay his membership fee. Last summer, at the close of the session of the National Educational Association at Madison, I had the pleasure of visiting the Northwest; and in Washington Territory I found that the highest salary paid in that Territory was \$1,400, while drivers of oxen in the lumber camps received three to four dollars a day and their board, with the added compensation, the

most blessed good health, and appetites enjoyed by no mortals this side of Alaska.

I could speak of other influences as affecting the tenure of office of teachers in our ungraded schools, such as the brief tenure of the official life of the school trustee and committee-man, the cheap way of cheapening schools by cutting down the wages of teachers, the kinship, and the political and religious affiliation, which sets up and pulls down, the complicated and disjointed system which puts the examination in one set of hands, the certificating in another, the employing in a third, the supervising in a fourth, and the general faultfinding and turning out in all hands, so that the teacher who has run the gantlet of this exquisite inquisition will lift up the devout prayer, "From further persecution from this infernal host, good Lord, deliver us." Who would not flee from such tortures to the pains, pangs, and perplexities of wedded life? There is a class of teachers, however, a growing class, who have claims to a longer tenure of office, and whose claims should be allowed. They are those who, at the outset, devote themselves to the profession of teaching; who give many years and much labor and money to the preparation; who enter upon it as their life work; and who give up the honors and the prizes of life for the simple and single purpose of teaching, elevating, and inspiring the younger life in our schools. The purpose is noble, the sacrifices are great, the labors are abundant, often excessive, even oppressive. Many of these persons have taken the courses of study of our normal schools and colleges that they might the more successfully accomplish their chosen work. Their fitness for their calling is found in their self-consecration



to it, and their qualifications have been determined by the faculties of colleges and normal schools, and approved by competent examining boards. Still further experience has also been their schoolmaster to establish their principles and perfect their methods and discipline their characters. What of such, their status and their tenure? In the first place, they are, and of right may be, styled professional teachers. The law of their survival as teachers involves the two elements, superiority both physical and mental, and harmony with one's environment. Translated into the vernacular of our profession, this law declares the conditions of permanent success and long tenure: (1) capacity, physical, mental, and moral; (2) professional acquisitions, plus natural gifts; (3) the attainment of certain standards of qualifications, as determined by experimental tests, under experts, including trial tests in teaching; add to these the zeal and enthusiasm which foreshadow great success, as a prophetic gift, and you have all that compels to true teaching, and against which no earthly power can prevail when the teacher is once installed in her high office. "I must teach," is a commission which man can neither give nor revoke. Mary Lyon of Mt. Holyoke, Francis Wayland of Providence, Samuel Taylor of Andover, Horace Mann of Antioch, Arnold of Rugby, Froebel and Pestalozzi, Socrates, and Jesus of Nazareth, the Great Teacher, held certificates, God-given, which man had neither the ability nor the wish to annul, and every true successor of these has a tenure of office and in office which the civil service cannot improve. Society must and will have such, and their positions are as secure as their services are valuable. As a matter of fact, their sublime

devotion often shortens a tenure which in other departments of faithful labor might enable the toiler to reach his threescore and ten.

The question has been under discussion in Massachusetts for a year or two, whether teachers should be subjected to annual elections, with the consequent opportunity for some obstinate committee-man to interpose his objections to a faithful teacher. In our city of Boston, the case not unusually occurs that a junto of the school board, to chastise some offending teacher, will, at the annual election in March, to which the 1,200 teachers are subjected, either cast blanks or some negative votes when the names of faithful men and women are nominated for re-election. Our own judgment is that this method of procedure is little less than petty persecution, and should not be tolerated for an hour in a semicivilized or Christian community. When, after proper tests have been applied, a teacher has been found qualified to teach in a community, and an election has been made, that election should be understood as applying to the term called, in civil service and in judicial office, "during good behavior"; "good behavior" standing for satisfactory service under favorable conditions, it should be assumed as a matter of principle that the service is fixed, until the conditions are changed, and the proof of such changed conditions must rest upon the school board. If at any time, no matter in what portion of the school year, a teacher shows that her services are not profitable, that for any good service she has ceased to be of value to the schools, then her case should be decided by itself, and that, too, only after a most careful examination of the case, and a hearing given to the teacher to answer

any charges preferred or faults found. Summary dismissals of teachers in our graded schools without notice and reasons are unauthorized, unjust, and are little else than Star Chamber decisions. In our civil service, it should be considered a political crime to remove a competent officer without a reason. I like what Lyman Abbott says in the *Christian Union* of June 25 : —

“ The Postmaster-General has, in a public statement, indicated the kind of acts which constitute, in his judgment, ‘offensive partisanship.’ They include the editorship or publication of newspapers containing either scurrilous personal attacks or a manifest malignancy of political feeling; the use of the post-office as a place for the political placards of one party with the refusal to allow those of the other to be exhibited; the employment of the office as a place for political organization, or such an active participation in political organizations as to impair the proper performance of the duties of the office. To this we may add that it is announced that the President requires proof of partisanship, refusing to sanction a removal without adequate evidence; and that in eighteen cases he has issued commissions to officials appointed by President Arthur in the closing days of the last administration. The President’s position, that no one should be removed without proof, is clearly just; and if it is true, as alleged, —and we have as yet seen no contradiction, —that the postmistress at Nyack, N. Y., has been removed for alleged malfeasance in office, without evidence and without opportunity for self-defence, the administration has not only perpetrated a political blunder, it has committed a political crime. The doctrine that no one shall be removed from office except for cause, carries necessarily with it the doctrine that no one shall be removed from office without an opportunity to be heard in his own defence in reply to the charges preferred against him.”

I would have the postmaster of this city feel assured that if he fulfils the duties of his office faithfully and impartially, that there is no power on earth that can remove him; and that if he does not, that there is no

power in earth or under it that can keep him in it. I would have the superintendent of schools, the principals, the teachers, all subject to the same great laws of competency, permanency; incompetency, removal; and as "innocent till proven of guilt" is the law as to crime, so should the same law apply to the properly certificated and regularly qualified of our educational workers. "Turn the rascals out" only when they are proved to be rascals. Don't assume them to be *rascals*, and then go through the annual farce of voting them in.

But what shall we do with the incompetent now in? Shall we not give reins to the unlicensed and set premiums on the unqualified, if we adopt the civil service? There is no earthly justification for keeping an incompetent teacher in any school at any time. The school is for the children, not for the teacher; and no man has a right to be a pensioner on public bounty without due process of law, or draw an annual salary for stupidity, invalidity, or superannuation.

If our teachers were elected till they were removed for cause, then we should have greater care in their selection. Committees would hold a closer watch at the entrance doors of the schools, where the watch should always be placed; and, after a proper probation, the teacher should feel the confidence and satisfaction of being in the employ of business men who conduct schools on business principles. I have been in business in Boston since 1874. Our clerks and employees are selected for life, or until we can get or want better. They all know and feel it. We are a family with mutual interests, and with a common purpose to help each other. If our chief clerk should be suspected of dishonesty, we should try to tell him of his shortcomings before the time of the

annual election, and, if he was proven guilty, I think we should try to find a way to waive the annual election in favor of immediate expulsion. This seems to be the common-sense way, the real civil-service way, and the only way that will give our teachers that confidence and repose in their work they so much need. I would sustain and promote the qualified, and criticise and remove the unqualified, at any and all times, and thus relieve teachers, pupils, the community, the school officials from that annual torture, which is often in the results as cruel and unjust as the palmy days of Spanish or English inquisition.

I am happy in the belief that we are near the days which may be styled the golden, in the experience of teachers, nearer even than we think, if President Cleveland proves to be a real civil-service reformer, as he has promised to be. That good time will see, —

*First.* The best men and women seeking or being sought for the teacher's profession.

*Second.* Their qualifications will be equal to the teaching of little children.

*Third.* They will be examined by competent examiners who are experts, some of whom will be teachers *emeritus*.

*Fourth.* They will be hired and paid by the authorities who pass upon their competency.

*Fifth.* The schools will be annual schools, whose school year shall not be less than two hundred days, and the minimum salary and the minimum school year will be fixed by the State.

*Sixth.* These teachers will be elected, after a proper probation, for and during good behavior, and may be removed at any time for cause shown, and the teacher heard.



*Seventh.* Teachers who have completed forty years of service in one town or municipality will be entitled to an honorable discharge, and an annuity for the remainder of the natural life, not exceeding ten per cent per annum on the maximum salary received before such discharge.

*Eighth.* There will be teachers' savings banks, in which each teacher will deposit monthly ten per cent of the monthly salary, to be placed on deposit at a fair rate of interest, to be drawn upon whenever emergencies may arise demanding special resources.

With these expectations before us, of having as successors a race so well qualified that they will all have normal school or college diplomas, county examiners' certificates, permanent tenure that will look onward towards the sixties and seventies, with an annuity and a savings-bank deposit to smooth the paths that slope towards the setting sun, we shall all live the happier, even if we die without the sight.

## VI.

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### THE TEACHER'S DUTY TO HIS OFFICE AND TO THE COMMUNITY.

BY MR. F. W. TILTON, ROGERS HIGH SCHOOL, NEWPORT.

I AM perfectly sure that no person of ordinary feeling can look over this assembly of teachers, and think of the thousands, ay, tens of thousands, of youth whose characters you have helped or will help to mould, without being most deeply impressed with the thought of the influence exercised by this audience in determining the future. Do any of us rise at this moment to an adequate conception of it? It is a temptation at such a time to throw aside the cold pages of manuscript, which have been prepared without the inspiration of such a presence, and to give the short hour to a spontaneous interchange of thought upon the hopes and fears, disappointments and successes, shortcomings and great possibilities, which are common to us all in our work. I shall be more than satisfied if I can help you to a more healthful view of the problems which enter into our daily lives, and enable you to take up your burden from day to day more cheerfully and more hopefully. In speaking of the teacher's duty to his office, I would urge first the cultivation of a proper sense of the dignity of your work, and of its peculiar responsibilities. Not a word too much has ever been said about the sacredness of your calling and the need of the highest wisdom in discharging its duties. Have you ever thought

just what the nature of its responsibility is? We are not fine artificers in gold and silver. A maker of telescopes has told me that he works for many months upon the surface of a single great lens. A false movement of the hand at any moment, and the toil of months, or years, it may be, is thrown away. A block of spotless marble is committed to the sculptor, and just as a form of beauty, faultless in proportion and in every detail, is appearing as the result of patient toil, a false movement of the chisel mars the work, and the exultant feeling of the artist gives way to disappointment. But to our hands are committed, not metals or glass or marble, but immortal minds to be guided and moulded. What skill, what regrets, what labor shall ever obliterate the results of negligence or poor workmanship on our part? A fuller consciousness that your labor from day to day is going far to determine the character of the men and women into whom your scholars are so rapidly growing, that the quality of the work you are doing from day to day will absolutely appear and reappear in the character of the intellectual and moral influence exerted in later years by your pupils and by those who feel their influence in turn, cannot fail to inspire you with higher views of the importance and dignity of your office. A proper self-respect will thus be quickened, and you will be more dissatisfied than ever with anything less than the fullest preparation possible both of mind and heart for such a work. During the years that he is peculiarly susceptible, intellectually as well as morally, to the influences thrown about him, the child passes more of his waking hours with his teacher than with any one else, not excepting his parents. It is clear, then, that a teacher whose influence is positive and constantly uplifting may

give a deeper impress to the future than can be given by many whose spheres are more conspicuous ones. At the same time that these thoughts bring us to a closer view of our responsibilities, it ought to cheer us thus to look away occasionally from the narrow horizon of our daily work as it weighs upon us, sometimes seeming to be little more than a routine of drudgery full of discouragements, and to see that, in a very real sense, all that we do is passing into history. He was a wise man who said, "It was the Prussian schoolmaster who gained the battle of Königgrätz." The schoolmaster was not there. He was sleeping quietly perhaps in the village churchyard. But his work was there. The battle which gave Prussia the supremacy in Germany was *fought* upon the field. It was *won* in the Prussian schoolhouse. Intelligence, then, which has been quickened in the schools, and the staying qualities which have been developed there, bear acknowledged fruit even on the field of battle. If, in the great moral and social questions that are to agitate the coming generations, if in the severe conflicts between demagogism and corruption on the one hand and pure government on the other, between atheism, it may be, and the Christianity of our fathers, enough true men are found who will stand and persevere until the victory is won, what fair-minded observer will deny that on these higher battle-fields the decisive influence may be traced to our American schools? Whether this influence shall be there in proper kind and measure rests largely with us and our fellow-workers.

There is another duty of the teacher to his office which is less often brought to his notice perhaps than others, but which should hold a conspicuous place in

our enumeration. There can be no lofty conception of the teacher's office which does not demand that he know, so far as possible, the *whole nature* of the wonderful being whose training is intrusted to his hands. The greatest artists have found a thorough and minute study of physiology of immense value in the portrayal of the human figure; and will any one dare to undertake the training and development of a human soul without bringing to his aid the rich results of ancient and modern psychological research? This primary duty involves first a careful study of the laws of the human mind, including its natural order of development, and also a thorough appreciation of the relative value of the various ends which are to be aimed at in education. No one can make any pretence that he is doing his work scientifically, until he is directing every effort with reference to fixed laws and principles. Pre-eminently must this be true of one who deals with so subtle a thing as mind. Yet does not much of our teaching proceed upon principles at direct variance with laws of the mind, which are as well defined and as easily comprehended as the most common physical laws? Let me take a very simple illustration: We will suppose a class of children to be beginning the study of botany. The lesson includes the definition of a *node*. The definition is correctly repeated, and the child then points out a node upon a piece of bamboo. Now, in so simple a matter as this, a mistake has been made. I think you will agree with me that there has been a serious departure from the method which the study of nature's order would suggest. This would have required the teacher to show the class a node upon the bamboo, or a stalk of Indian corn, explain that the tissues are interlaced or interrupted, and



then, as the last thing, give the name. Stated more abstractly, nature demands that, instead of the name, the conception, and then the thing, the order should have been, first the thing, then the conception, and last of all the name. The infant knows his mother, his rattle, and his kitten long before he knows the names by which he may represent them. When illustrated so simply, this may seem trivial; but the principle, when carried higher, is very far from trivial. Never allow a mere name to take the place in the mind which a thought ought to occupy. Few, again, study as they should the wonderful principle of association with reference to its use in education. In its influence upon memory it stands only second to attention, which we all admit to be absolutely essential to high attainment. Some writers have gone so far as to refer to association nearly all the phenomena of mind. We need not adopt extreme views as to the part it plays in our mental constitution; but if we fail to use so remarkable an aid provided by nature for our work, we are surely as criminally neglectful as a surgeon would be, who should ignore any appliance which is invented, suited to enhance his patient's comfort or safety.

Guizot's political career is said by some to have been disastrous, because he knew books better than men. The knowledge of men or children depends largely upon understanding the human mind. But our study thus far has covered but a part of the child's nature. The teacher has come to feel that his work lies largely with the intellect of his pupil, and so it does. But if satisfied to stop here, he makes a terrible mistake. A bright child enters the schools. He passes on from grade to grade, and finally reaches the end of a long

and thorough mental discipline. His intellect is thoroughly awake. His faculties are sharpened. His powers are developed. This is all we know of him. He goes out into the world. His power for good or evil has increased many-fold while he has been in our hands. But what have we done to determine in what way shall he use these powers? Have we left out of the account parts of his nature whose training is even more important than that of the intellect? How is it with his will, that tremendous enginery with its immense driving power? Is that curbed and under control? We stand upon a bridge and see the locomotive rushing on at frightful speed. So long as it keeps upon the track, obeying the touch of the engineer, this power is beneficent. But take away the restraints, and lo, what a prolific source of destruction and death! If we neglect to train the will as well as the intellect, shall we wonder if we find that the very forces we have developed hasten and intensify a ruinous failure? How is it with the moral nature? Has it been fortified? Has its supreme importance been constantly insisted upon? Has it grown apace with the physical and intellectual stature? Has our pupil learned to put *right* above influence, power, wealth, everything? If not, we send into the community an enemy, dangerous to its welfare, the more dangerous because he has received a training, well intended indeed, but sadly one-sided and defective. If the springs of action are neglected and perverted, the moral life will correspond. There must be pruning as well as growth in education. Thus only shall we secure that conscience beneath all learning, without which all learning is worse than vain." If a child cannot be taught truthfulness and arithmetic too,

better let the arithmetic go. While thus maintaining the teacher's duty to recognize the varied responsibility which his office implies, I wish also to emphasize the limits of this responsibility. My experience may have been a peculiarly fortunate one, but as I review my connection with various schools, through a term of years, I am impressed with the devotion and conscientious fidelity of the teachers with whom I have been brought in contact. I know of no profession or class to which higher praise can be safely awarded in these particulars. It is against some of the natural results of these noble qualities, when their possessor is brought by nervous exhaustion into a morbid condition, that a word of warning may be needed. The difficulty often is to look at our work sensibly, and to draw the line between those parts of our failure to accomplish what we wish which can be affected by a change in ourselves, and those parts which are beyond our control. While the teacher's anxiety to leave nothing that is within his power undone deserves unmixed praise, it is painful to see him discouraged and morbid over matters with which he has no more to do than with the movements of the planets. You have a dull pupil. Be faithful with him of course; be patient; give him freely of your time, if you will; be sorry for him; but do not let the fact that his progress is slower than that of others pursue you, and make you miserable and unfit you for your duties to others, because in this way you will do a positive wrong to yourself and those about you, without accomplishing any corresponding good. God has seen fit to endow his children in very different measure. We might, with our inferior wisdom, have chosen to have it otherwise; but we cannot change the divine order,

and have only to accept it and work under it, anxious only lest we fail to do our part.

The teacher also owes it to his office to cultivate his individuality. God has given each of you some gift which is peculiarly your own, and there are things which you can accomplish in your own way better than in anybody else's way. One of the tendencies of modern life is to wear down individualities and make people alike. Some think that as high mountains cannot appear in a generally level country, so fewer pre-eminently great men are produced when all attain a fair degree of intelligence. While we shall all agree that it is better to do without the giants than to dwarf the multitude, still, this levelling process is not without its disadvantages. One evil, arising from the extreme minuteness of detail in the methods which are sometimes forced upon teachers, is the crushing of a certain spontaneity or originality which, if freely encouraged and directed, would give its possessor a power peculiar to himself. "Nothing so becomes the mind," it has been said, "as its natural carriage; hence its ease, its grace, and all its zeal or apparent facilities." Do not try to be your neighbor, however much you may admire him, but be yourself, — yourself perfected as far as possible, but still yourself. There is such a thing even as taking too much advice. Council is sometimes given most freely by those whose experience has not been so long or so valuable as your own.

You have probably learned not to try to follow all the advice given even at Teachers' Institutes. With a confidence in yourselves that is at once reasonable and proper, you will not be vacillating in your methods and consequently weak in execution, but, carefully maintain-

ing your present efficiency, you will add to it by adopting whatever commends itself to you as wise in the suggestions of others.

The teacher owes it to his office to be honest, — honest with himself, honest with his pupils. We must never be afraid to say, "I don't know." I have never forgotten a story, which I heard when a boy, of a school-master in a back district who had a pupil reading Cicero. The poor boy came to his teacher one day with troubled face, and asked him for assistance upon a troublesome passage. "Oh, go to your seat and study it," said the teacher, "and it will all come right." "I have been studying it," answered the boy, "and I cannot read it." The teacher then took the book and held it carefully to the light, then hawed and wiped his glasses and took another good look, and finally dismissed his pupil with the remark, "Well, that is a rather bold expression even for Cicero." How rapidly the teacher loses the respect of his pupils who tries to conceal his ignorance, or his liability to error, under some silly pretence. Aside from the immorality of such a course, the immediate result is loss, not gain. The pupil quickly penetrates such a flimsy disguise, and accurately measures him who resorts to it. All such unworthy attempts are especially disastrous in their moral effects upon the pupil. He naturally regards his teacher, not only as his superior intellectually, but also as a model and safe guide morally. It is sad to think that this trust, so properly entertained, should ever be belied, and that the young mind should learn its early lessons in prevarication and deceit from one who should be the guardian of its moral purity.

Let me urge in this connection, as another duty of the



teacher to his office, the cultivation of enthusiasm for his work, and sympathy and patience with his pupils. Indifference is as fatal to high success here as elsewhere. As well gently lay the flint by the steel and wait for the spark, as expect the merely mechanical teacher to kindle the intellectual fires which lie dormant in the minds of his pupils. No, the first essential to success lies in the sharp friction of mind with mind which a proper enthusiasm excites. Enthusiasm here, as in every other sphere, is the offspring of love. It can hardly be manufactured. The true teacher sees a far deeper and more inspiring meaning in his task than is suggested by his immediate surroundings. He is a builder who, while he cuts with weary hand and arm the stone before him, sees at the same time the completed edifice into whose usefulness and beauty the toil of every day is entering. If the physician in dealing with the body kindles such enthusiasm that, as some one has said, he "spends raptures upon perfect specimens of indurated veins, distorted joints, or beautiful new cases of curved spine," it certainly is not unreasonable to expect those who have the care of the mind to find their interest enlisted even in the less attractive and less gifted of those under their charge. Take away the enthusiasm of an Agassiz or a Taylor, and he would never have been heard of.

I know of nothing which more fitly characterizes the indifferent teacher than the sad conclusion that he has nothing to draw with, while the well is deep. The work of such a one is not teaching.

When the Macedonians were in their greatest danger, Aristander, the soothsayer, clothed in his white robes and holding a branch of laurel in his hand, advanced

among the troops, and crying out that he saw an eagle hovering over Alexander's head, a sure omen of victory, he showed with his finger the pretended bird to the soldiers, who, relying upon the sincerity of the soothsayer, fancied they saw it also, and renewed the attack with greater ardor than ever. I scarcely need make the application. The truly enthusiastic teacher will constantly see the eagle as an omen of final success, and make it real to the pupil's eye of faith. Under the influence of such an enthusiasm, sympathy with the sensibilities of a pupil and patience with his difficulties will be easily cultivated. The opinion of his fellows is to the child, in his little world, what the opinion of the community is to the man. It is painful to see a teacher so far abuse the authority of his office as to crush these sensibilities which ought to be guarded and cherished as a part of the child's nature through which the most potent appeals for good may be made to him. The impatience which finds vent in cruel ridicule is not at all raised above the meanness of the bully, and is vastly more disgraceful than any dulness in the child, or petty fault that is thus publicly paraded. Nor have we any right to ignore the limitations of the child's mind which nature has imposed. Our impatience at their existence is pure folly. While your pupil's power of abstract reasoning is scarcely more than germinal, he is your equal if not your superior in active perception and in memory. What right have we to indulge our impatience at the failure of a child to grasp some logical sequence which involves relations and abstractions quite outside his habits of thought? May we not all study with profit the example of the teacher, who, before he could make a partially idiotic child appreciate the difference between

a globe and a cube, repeated the same experiment six hundred times, and then as the reward of his patience met with complete success? There is something grandly heroic in the effort to awaken intelligence in a scantily endowed and perhaps unattractive child, whose faculties are surely too dull to appreciate the sacrifice that is made for his improvement.

"O'er wayward childhood wouldst thou hold firm rule,  
And sun thee in the light of happy faces?  
Love, Hope, and Patience, these must be thy graces,  
And in thine own heart let them first keep school.  
For, as old Atlas on his broad neck places  
Heaven's starry globe, and there sustains it;  
So do these upbear the little world below  
Of education, — Patience, Love, and Hope.

Yet haply there will come a weary day,  
When, overtaken at length,  
Both Love and Hope beneath the load give way.  
Then, with a statue's smile, a statue's strength,  
Stands the mute sister Patience, nothing loth,  
And, both supporting, does the work of both."

The teacher's duty to his office, which I wish here to emphasize especially, is that of aiming constantly at his own improvement by cultivating a distinct intellectual life, both for its own sake and as an antidote to any narrowing influences of his own routine life. Do not say, "I have no time." Everybody can find a little time. Improve the fifteen or thirty minutes a day, if it cannot be more. If little, day by day, it is much in the course of years. Interest yourself in something quite distinct from your school work, that you may come to it with the zest which is brought by decided change, and that it may break in upon the monotony of your

thoughts. The field is surely wide enough for all to find a pleasant way. If your tastes are scientific, you may combine healthful exercise with study. If you discover special tastes, feed and develop them. Many, doubtless, are conscientious in allowing their work to absorb their whole thought, feeling that every moment is needed for the proper performance of the very tasks to which you mean to be so conscientiously faithful. Depend upon it that if you neglect your own intellectual advancement, you will signally fail to magnify your office. If you allow yourself to rest satisfied with present attainments, however respectable they may be, your mental garments will soon look very threadbare. Your mental activities will soon deteriorate, unless they be constantly exercised in healthful and stimulating ways. You, above others, need a well-filled mind. Without these enriching influences, the tendency is constantly towards barrenness. A mind shut out from them reminds one of a landscape with a few hill-tops here and there, but in which one searches in vain for the beautiful slopes of green and well-watered glens and clustering flowers which the hills suggest. Next to high morality and the Christian graces, I am free to say that I consider well-formed tastes for study and ambition for improvement the sources of the richest influences which flow into our lives ; and I cannot admit for a moment that they are not within the reach of every one of us.

But not to weary you, let us pass on to speak of a very few of the duties of the teacher which grow out of his relations to the community in which he lives. The teacher shares, of course, the duty of all good citizens to exert in a modest and quiet way an elevating influence. His intelligence, and his generally correct

views upon the moral questions which are constantly arising, make it possible for him to affect favorably the moral tone about him, and to assist in quickening and elevating the public conscience. If he would do the best service in these directions, it will not be by thrusting himself into notice, or by taking so decided a position upon indifferent matters as to lessen his influence with those who chance to oppose him, but rather by the more quiet and dignified course of *living*, and when sufficient necessity arises, *speaking* such sentiments as the interests of public morality and public intelligence demand. While his acquirements should be in every reasonable way at the service of any whom he may aid, he is not the town oracle, and must not feel under obligation to know everything. Popular expectation in this regard is as likely as not to be above what is reasonable. You are familiar, perhaps, with Voltaire's amusing account of a correspondent who asked him to let him know by return mail whether there was a God, and of another who asked him to let him know at once the true interpretation of the universe. Not very dissimilar incidents might be drawn from the experiences of many a teacher. But while thus recognizing the teacher's general duty to be useful to the community in many ways, exerting a positive influence on the side of good morals, intelligence, and pure government, I would call particular attention to his duty to influence public opinion upon all questions connected with education. He should hold and express clear views upon such important educational topics as are now agitating the public mind. If he believes that it is eminently dangerous to leave the responsibility of a decision which is to determine the whole drift of his life to a mere child of twelve



or fourteen years, who knows absolutely nothing of what a liberal education is, let him stand by his view and defend it as logically as he is able, no matter who opposes him. If he is fully convinced that a *dilettante* course of Spanish, music, and art, when substituted for the old-time drill in mathematics, classics, and logic, will fail to give to the world, I will not say its giants in mental power, but the strong, well-balanced intellects which have been trained by the latter system for our judicial and professional ranks, let him stand boldly against any current, however popular, which is likely to lead away from the courses of study best fitted to develop mental power and promote vigor of intellect. Upon no subject, probably, that interests the public mind is there more artificial talking and fallacious reasoning than upon this very subject of education. Now, just as the clergyman should be prepared to give his reasons for the faith that is in him, and to meet the reasoning of the sceptic with the soundest arguments of the schools, so the teacher, while welcoming and profiting by intelligent criticism, should study the sophistries concerning education of which the air is full, and detecting the fallacies involved, should pierce them through with the sharp point of sound argument. Whose place is it to do this, if not his? This is his own department. Here, if anywhere, he is an authority. Here he, if anybody, should keep jealous watch. When defence is needed, he, from his familiarity with the ground, will properly take the lead. I can illustrate only briefly, mentioning a few of the most common positions, held superficially, for the most part, but not maliciously, and indicating what seems to me the natural line of argument in reply.

First, the idea has become quite prevalent, and the

statement will frequently reach the ears of the teacher, that so large a proportion of the rising generation is being highly educated that the ranks of laborers are being thinned. There are fallacies here which any of you may detect and answer. The very men who decry what they call over-education, if asked to-day to what proportion of the population they would give a liberal education, would set a standard far in advance of what the school and college are doing. They are simply ignorant of the facts. Would they give the advantages of a collegiate or thorough scientific course to one in one hundred? We as yet scarcely approximate to such a result. Would they give a good English education to one half? If so, instead of placing themselves in opposition to those who are striving to promote general education, let them pull with us hand in hand, and they will remain many years our companions before their own standard will be reached. And it is also implied in this criticism that a man becomes in some way less a laborer when he uses his brain than when he uses his hand, and that it is a tendency of education to degrade manual labor. If there is any system of education which decries labor and casts disgrace upon it, blot it out; but do not trail the noble idea of sound culture in any such mire. If the educated man, instead of turning the spinning-wheel, is setting up machinery which will save seven eighths of the cost of manufacture, is he idle? If, instead of plying the sickle in your field, he is inventing a machine with which you will mow acres in a day instead of rods, is he idle? If, instead of pulling his skiff across the river, he is building a bridge which will accommodate the traffic of cities, is he a burden to the community? If, instead of

driving the post-chaise, he is experimenting, while other men sleep, upon methods of making the electric current our letter-writer, is he to be denounced? But suppose the worst comes to the worst, as our friend would consider it, and everybody is educated. What then? Does any one suppose for a moment that people would look on and see each other starve to death? The trouble with the Virginia colonists was, not that they were educated, but that what education they had was of a very false kind. The whole matter is a self-regulating one. So long as the educated man can secure time for the employment of his highest faculties by intrusting to some one else labor which can be as well performed by another, he will take, and ought to take, this course. Whenever necessity demands a change in the arrangement, it will be made. No, everything points to a marvellous gain in our material interests as more brain work is enlisted. Our most profitable farms to-day are worked by brain as well as muscle.

Say to our critic, also, that he overlooks the inestimable injury done to him against whom the avenues of mental improvement are closed. If shut out from all that is higher, why expect him not to yield to the lower and sensual? What a terrible mockery to say to an ignorant man, "My friend, you are among the most fortunate of men, and we are trying to keep your class as large as possible." Those who are plodding through life under the incubus of ignorance are often as conscious of their curse as is the leper of his sores or the cripple that he cannot walk. Another popular impression was voiced in what was said to me some years ago by a gentleman from another city. "I think," he said, "that there is more provision than there should

be in our higher institutions of learning for the aid of poor young men. After they receive their education, they do not know what to do with it. I am tired of having young men come to me for employment. I ask them what they can do. The answer is that they have graduated from college and are ready to take any suitable position. But there are few positions which they would deem suitable, which they are fitted to enter at once. To assume business responsibility, there must be a long special training." This is specious, and there is danger of being led by such remarks to entertain a sort of sympathy with the views of those who make them. But perhaps a moment's consideration will show us what answer the friend of education may make. That a man with one training is not at once fitted to enter a work requiring a very different training is evident. But it is no more fair to argue from this that the training which he has is of no value, than to say that the chemist is a burden to society because he cannot make a watch or repair a carriage. The fact that there may be a few weeks or months before a person who has just left the school finds his work, by no means proves that there is no work for him. Yet if you will only consider, you will find that the conclusion above quoted rested upon the bare fact that *there is a time* when such persons are in search of employment. How much fairer it would be to follow these very persons, and at the end of five or ten years to ascertain whether they are useful men, occupying important positions, and exerting an influence over their fellow-men which their education has helped them to win and maintain; whether, in short, their labor is more efficient as a result of their training. Say to our critic that the graduates of our schools and colleges,

who have found their places and are now helping the world forward in every good way, supply the standard by which to judge the institutions where they were trained far more truly than those who are at present in attendance there.

But once more the criticism reaches our ears that the education of a person in humble life lifts him out of sympathy with his surroundings, causing pain to friends as well as to himself. Well, this is undoubtedly true sometimes, though it does not speak very highly for mutual loyalty between the parties. Give the objection its full weight, however, and then show its author what a miserable makeshift of an argument it is. The suggestion is most frequently made by those who have themselves education and position. But, mind you, if you look back two or three generations, you will usually find that, fortunately for them, their grandfathers acted upon different ideas.

. . . . .

The teacher should hold up to others, as well as keep steadily in view himself, the ends which are to be aimed at in all education. It is an altogether mistaken and unworthy idea that the acquisition of facts holds a first place among these aims. It ought to be a mere truism, that the amassing of knowledge is altogether secondary in importance to the training of the intellectual faculties by careful methods to their full capacity, to the development of mental power. Highly cultivated faculties of perception, comparison, analysis, and so of judgment, are of far greater value than mere superior receptive powers. As has been wisely said, "The information will come after the discipline much faster than the discipline after the information." And yet,



palpable as this seems, the popular misapprehension upon the subject is very widespread. The gradual adoption of the kindergarten as a part of the public-school system is a recognition of that part of this great truth which relates to the perceptive faculties. There is somewhat greater slowness in recognizing the importance of critical and prolonged study of abstract subjects. The popular voice cries for the *practical*, as if anything could be more practical than *power*! Many a parent says, the moment his child leaves his spelling-book and arithmetic, "I do not want my child to study algebra and Latin, and a mess of trash which he will never use." But, my friend, the teacher may answer, does Nature lead your child to walk and run and jump, because she intends that he shall be a courier or an acrobat? Do you encourage him to enter the gymnasium, because you intend that he shall be a teacher of gymnastics? By no means. Nature in the one case, or the parent in the other, knows that whatever the child's future, he will be in absolute need of physical strength. The foundation of physical power must be laid during the years of childhood. Equally true is it that your child can never develop mental power without long-continued and regular mental exercise; and the more difficult and varied this exercise, provided it is kept within proper limits, the greater will be the power. If it has been found by the experience of centuries that certain groups of studies afford a better mental gymnasium than can be secured in any other way, is it not folly for you to object to the very provision for your own child, which is to give him the best equipment for meeting the perplexing questions of business and of professional life? If the physician pre-

scribes rowing or horseback riding for your child who is not physically strong, you appreciate the experience which leads him to prefer these exercises to others, and you do not think of the time spent upon them as wasted, even though they have nothing to do with the child's later pursuits. He will have no later pursuits, if he has no physique; nor will his mental pursuits be a success, if he neglects the means of storing mental power. Time, and your patience as well, I fear, forbid me to carry these observations further. There are very many who, from the habit of criticising or advising limitations of one kind and another, give the impression to others and half persuade themselves that they are opposed to education itself. You will be constantly challenged to defend your views. I therefore urge you to prepare yourselves to do this. You will hear arguments more or less specious which may otherwise annoy and disconcert you. You can always fall back on great principles. Why these wonderful capacities in man? The ideal can be nothing other than full development. It is better to rise than to sink. From the time of the rebellion in heaven to the present, it has been better to rise than to fall, and men will never rise so long as they look down and reach for the things which are below. Fellow-teachers, you have a noble work, full of magnificent opportunities. Though we cannot rise to it, we can at least make our aim a high one, never forgetting the wise proverb, if I may call it such, "Children have more need of models than of critics."

## VII.

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### THE EDUCATION NEEDED.

BY MR. H. M. WILLARD, PRINCIPAL OF VERMONT ACADEMY,  
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THAT education which will develop the highest type of manhood is the one needed. The popular demand is for the *practical*, — an ambiguous, or rather an elastic word, subjective rather than objective, meaning in the educational world very much the same as *orthodox* in the theological world, viz., that which each thinks to be right; in the mouth of a specialist, it may mean the education to be acquired at the agricultural college, the technical school, the school of manual training, or at whatever school best fits in his specialty. In my own school is an enthusiastic teacher of drawing and painting, another of music, another of military drill, another of history, another of science, each of whom is an enthusiast in his work, pushing it as far as he may, apparently regarding his instruction as furnishing just the education needed. This of course is right, if suitably controlled; it creates an interest in each department; but it serves to illustrate the thought that, in the eyes of men generally, that is the needed education in which they are specially interested.

That cannot be called a practical education which gives to a being, so highly endowed as man, anything short of a well-rounded development of all his powers. He is endowed with intellectual, moral, spiritual, and

social powers, and each of these, under the right cultivation, may be highly developed. If evolution unaided has produced, from so unpromising an ancestor, that which Pope ventured to call the "noblest work of God," what may not man become when helped by just the right education? The people pour out their money to secure it. The wisest men of all time have thought upon this question, and to-day it is discussed from the pulpit, the platform, and in the columns of the press. Governments realize its importance, and the very life of our Republic depends on a right solution. I do not therefore come before you to *settle* this question; but after an experience of twenty-one years in the work of education, having now attained my majority, I will venture to state some opinions arising from that experience.

As teachers we are learners. I am often reminded of Wordsworth's lines to his boy, —

"My heart for better lore would seldom yearn,  
Could I but *teach* the hundredth part of what from thee I *learn*."

A careful study of the best writings on education always pays, but the lessons which *may* be learned from the careful study of one's pupils are worth more than any others. Why does not the rule which the great Agassiz gave his pupils apply to teachers: in seeking for the best instruction, study the object itself, not some one's description of it? To know whether existing methods of teaching are the best, study the nature of those who are instructed, and find out whether the results are commensurate with the efforts. If not, let us adopt other methods suited to our pupils' needs. The mental and moral philosophy which we as teachers have learned from text-books in school are the mere alpha-

bet of the subjects ; but the daily contact for years with the minds of those committed to our guidance gives for our instruction object lessons far more profitable than the abstractions of theorists. The unfolding of character, the growth of intellect, the certainty with which like causes lead to the same results, — all these, if carefully observed, will richly repay the teacher, will give him invaluable aid in estimating what method in education will yield the best results, and will enable him to decide for himself, independently of the *ipse dixit* of others whose opportunities for judging are no better than his own.

Those subjects for instruction on which there is general agreement need not be considered here. With a theme so broad, it may have been anticipated that the whole range of instruction was to pass in review ; but we will present only a few subjects on which there is either considerable diversity of opinion, or a somewhat prevalent neglect. There are strong advocates for making instruction in Latin and Greek (the classics) the prominent feature in a liberal education, while others, opposed to this position, claim that mathematics and science should be the foundation of a liberal training. When the revival of learning from the darkness of the Middle Ages flooded the world with the wisdom of the ancients, the life of those times had nothing equal to this ancient literature for the culture of the mind.

The classic languages, especially the Greek, the most perfect medium for the embodiment of the highest thoughts of man, gave to the world, which for centuries had lain in darkness, an unrivalled history, philosophy, literature. Plato, Demosthenes, Homer, Cicero, Tacitus, Virgil, with the philosophers, poets, and historians of



antiquity, became the teachers of the modern world. Amid the intellectual darkness of the Middle Ages they had been providentially preserved, awaiting the Renaissance and the Reformation, which owed much of its fertility to them. For centuries have the scholars and leaders of thought sat at their feet; from them they have received that inspiration which gave to Germany, France, England, a literature worthy of the name. The scholars of these nations have conversed with Plato, and have learned the power of that great teacher; they have felt the spell of Homer's transcendent genius; and they honor the classic writers, who, like our own Milton, have written that which the world will not willingly let die. It is a precious legacy of the past, and an inspiration for the future.

The Latin and Greek languages, whose structure is most perfect, whose power for expressing thought with clearness, force, and precision is matchless; from which have been evolved the most cultivated languages of the world, to which they have imparted something of their own vitality; *languages*, dead only to those who have not felt the warmth of their Promethean fire, — these to-day are as instinct with life as when Demosthenes thundered against Philip from the bema, and Cicero hurled his invectives against Catiline from the rostrum. For the last three hundred years the classics have been the most potent factors in quickening and developing the intellect.

Now, then, having made the classics the foundation of mental training, and having been aroused to activity by their agency, men turned to other fields, and studied in the school of Nature herself. Here they have discovered facts, and by induction have arrived at laws

which have always existed, though understood only by the Creator himself.

"Go forth," says Bryant, "under the open sky, and list to Nature's teachings." Men have held "communion with her visible forms," and modern Science, like Minerva, has sprung fully armed from the brain of Nature. She has unlocked the universe and gathered from it stores of useful knowledge, swept away error and superstition, taught truth in place of illusion, and enriched the mind with boundless stores. She has alleviated human woe, lightened toil, multiplied comforts. Astronomy has numbered, measured, and weighed the heavenly bodies, and has revealed the supremacy of law, ruling with mathematical exactness throughout the regions of infinite space. By the aid of the microscope she has discovered the functions of every organ in the human body; has shown the connection between mind and the outer world; has proved that mental energy is a force correlated with light, electricity, and muscular action. What wonder, then, that science has her votaries and finds able defenders!

Unfortunately and needlessly, there has sprung up a rivalry and jealousy between the enthusiastic admirers of the classics on the one hand, and of the sciences on the other. Each claims the foremost place in the education of the people. Those who advocate the claims of the Latin and Greek, knowing the grand results accomplished through their agency in the past, would still give them the same prominence. They point to the unsatisfactory results from the teachings of science in the lower and secondary schools, and would give the classics the supremacy still. To them education means mental culture, the training of the intellect; these are

the graduates of our colleges, who have realized the value of these studies in their own experience. On the other hand, those who emphasize the importance of technical and scientific instruction, and those who have not by personal experience realized the disciplinary power of the ancient languages, looking for immediate results, having a clearer understanding of the sciences, as they deal with the tangible and visible, denounce the classics as useless, unpractical, dead.

But there is coming to the front a third party, who see the value of both; who regard these two branches of study as complementary, *not* antagonistic, and believe that only in the combination of the two is the broadest culture and the most practical education attainable. The study of classics alone might, of course, tend to make men unpractical; while the study of science alone, without those humanitarian and theistic ideas embodied in the classics, the study of matter, without recognition of beneficent intelligence, as ruling over matter, tends to narrow the mind of the student rather than to broaden it. In the words of Dr. Lincoln: "Just so far as science can discover the invisible in the visible, can read spiritual thought in material forms, and intelligent purpose in organic structure, and can trace the divine plan in the complex machinery of the universe, guiding its movements to moral ends, just so far will science attain power over men like philosophy and poetry."

On the other hand, let spirit and spontaneity be swallowed up by matter and law, so that man, in the words of Huxley, is only the "cunningest of Nature's clocks," how can enthusiasm in study survive, when nothing is left worthy of study? Science would lose its charm for earnest men; as Tennyson puts it, —

"We are not cunning casts in clay;  
Let science prove we are, and then  
What matters science unto men?  
At least to me, I will not stay,  
For I was born to better things."

The improvements in the methods of teaching the classics which have been made in recent years, the improvements in text-books, have quickened the pace of teacher and learner. There is more time for scientific study. The culture of the classics and the utility of the sciences, the liberal and the practical, can go hand in hand. Culture alone and for its own sake is not a sufficiently high aim; utility alone, for the sake of utility, will not produce that culture necessary for the wise discharge of duties arising from man's moral relations to his fellow-men in the family, church, and state, but each without the other fails. If, however, study first elevates the plane of one's intellectual activity, and thus prepares him for activity in that plane, he will have received the education needed, viz., the natural order of development.

But is there time for both science and classics? I believe with that eminent teacher, Prof. Le Conte, that what he so well calls the "natural history" of science, can be taught in our lower schools, where the perceptive faculties, the memory, and the intuitive reason are mainly cultivated. Facts, phenomena, and properties can be more easily learned here than at any later time; these belong to the realm of sense; the memory is retentive, and here the foundation can be laid. "We must catch the tide in its rise, if we would bear it on to the highest flood of power."

The heavenly bodies, their position, motions, phases;

the names of the elements, with their action on each other, and the compounds resulting therefrom; the habits, structure, and classification of animals and plants, — these, *all*, are but the natural history of astronomy, chemistry, and biology. These facts can all be acquired in childhood, just as a child can pick up, so to speak, what might be termed the natural history of the language of a foreign country much more quickly than the mature person. This work, however, has been reserved till the later years of study, when the reflective faculties and formal reason are to be employed in using the crude materials of knowledge in the mason work of science and philosophy. The educated man is a growth, not a manufactured article. "Like a tree, he may be watered and nourished and trimmed, but not made." If this elementary work in natural history is given him in youth, he assimilates it, and in later years is prepared for the science of the subject; for the study of the laws of form and structure, as revealed by comparative anatomy, physiology, and embryology; and, more than all, for the laws of evolution of these forms and their causes. If this natural method of development is followed, time is gained for both the scientific and classical study. Neither need go to the wall; each exerts on man a kind of influence which the other cannot. There is also an incidental benefit, which should by no means be overlooked. It is a most necessary part of education that the boys and girls be trained to use their eyes, to learn from the world around them the lessons which the Creator designs to teach them in the stones and trees, in the earth, air, and ocean. It is the natural instinct of a boy to gather and classify birds' eggs, to collect stones, and shells, and



curious things. If this instinct is used in teaching natural history, the interest is aroused, attention concentrated, thoughts called in, time gained. I know the usual plea is want of time. That is not for me to discuss here, though I am confident that the time wasted in faulty methods of teaching technical English grammar alone would be sufficient for this instruction. I have seen this instruction imparted in schools where no time was allotted to it by the authorities. I first saw it in Vienna, where the master of a large city grammar school, as we should call it, had gathered, by the aid of an enthusiastic class of pupils, an extensive museum for the illustration of several departments of natural history, and that, too, without the least intrenching upon his required work, in which his pupils were fully abreast of all the others of the same grade in the city. Pupils are thus trained to an intelligent use of the senses, to close observation, comparison, and rapid generalization, by intuitive methods,—the faculties most useful in active life, and most easily cultivated in childhood. The percentage of pupils who enter the secondary schools is very small; the teacher, therefore, who will do this, must feel repaid in the consciousness of having thus opened to his pupils new avenues to intelligence and happiness.

Had I time, I would gladly emphasize the importance of educating pupils in the care of their health, in physical development, and in their manners, all of which, in the present crowding of mental drill alone, are greatly neglected. But there is one subject which is more important than either of these, to which, with your permission, I will devote the rest of the time allotted me,—the importance of constant systematic training in

morality. As the years go by, and I see upon the stage of life many whose training was for years under my care, I realize more and more the responsibility and dignity of the teacher. We see some of our pupils achieving success, others making a failure, — possibly some making a complete shipwreck, — and we rejoice with them in their successes, or are filled with sorrow, and reproach ourselves for their failures.

The responsibilities of a teacher are great, not even second to those of the clergyman; for to the *teacher* the family and the state intrust their most precious possessions, on which their future depends.

Who can judge better than experienced and thoughtful teachers what is the education needed to bring forth the highest type of manhood? I believe that all *systems* of education will sooner or later fail, unless a systematic and thorough training of character is the foundation of instruction.

Lord Babington said that the first nine years is the seedtime of life. Untruths, then instilled, are seldom or with difficulty corrected. The needs of the age call for zealous workers. Work is productive; it begets genius and develops power, and there is no more important work for the teacher than the moral training of his pupils. The neglect of this is one of the most dangerous tendencies of the age. From the primary-school teacher who begins the training, to the college professor or president who finishes it, not one has the right to neglect the using of his influence, by direct and indirect means, to give the pupil right ideas as to his moral obligations to society. For one teacher to disregard this duty imposes upon the next a harder task.

"For each in turn the other's bounds invade,  
As in some well-wrought picture, light and shade  
Do oft so mix; the difference is too nice  
Where ends the virtue and begins the vice."

There is no more common mistake among our pupils than the tendency to disconnect the present and the future. They are not convinced that there is an immediate connection between what they do in school, and what they will be and do after school days are over. They may give their youthful propensities the largest license, may trench upon the proprieties and moralities current in the outside world, and their misdemeanors will be regarded as mere ebullitions of youthful spirits. But is it not true that the minutest act of life cannot be separated from its inevitable effect upon character and destiny? It *must* be admitted that intellectual culture has no necessary connection with excellence of character or purity of life. It is not a pleasant thought to dwell upon, but it is one upon which this nation is pondering, how far such education as our youth are receiving in our schools and colleges to-day ministers to their moral worth. How much is a collegiate education worth which graduates into society a young man who has little respect for its safeguards, no reverence for God and religion, and no regard for those lofty sentiments which humanity cherishes as its most precious heritage? Such culture is not worth what it costs, and such a young man is not fitted for the stern duties of life. Richard Grant White's article, entitled "Public School Failure," is no doubt fresh in your minds. He takes a gloomy view of the situation, is perhaps too severe, and yet says much that we must admit to be true. He presented a startling array of facts to prove that

among the native whites of this country who had enjoyed the benefits of our schools, crime had been on the increase for the last fifty years; that the schools had not lifted the people out of the wickedness of the past; but that crime, immorality, and insanity are greater, in proportion to population, in those communities which have been longest under the influence of the school system. Evidently, the schools have not exerted the influence that might have been expected! Why is this so? It is due to the fact that moral instruction is not made obligatory by the laws of the nation or State, and hence only those who are compelled by their own consciences, spend the time, thought, and strength which are necessary for this important work. The tendency of the times is to contrast one teacher's work with that of another, to compare the attainments of one class with those of another. And the instructor, knowing that the morals of his pupils are not to be examined, devotes all his energies to preparing pupils to make a creditable exhibit of intellectual attainments. In fitting a class for college, the chief care of the instructor seems to be that his pupils may acquit themselves as creditably as those from some other school, hence his energy is devoted to their mental discipline. The fact is ignored that the pupil is to be sent to meet the strongest temptations with but feeble power of resistance. "Like the beautiful son of Aurora, at Troy, he enters the battle-field armed, as he thought, flushed with hope and inspired by popular praise, only to fall too quickly by the underestimated strength of some foe of manhood, who strikes him down as did Achilles the too presumptuous youth." He goes from school to college, a magazine of power for good or evil. How will his power be directed, how

utilized? Will he become a Garfield or a Guiteau, a Paul or a Nero? His *mind* has been trained; what will he do with it? It will depend on his answer to the questions what he *thinks* of himself, what he *does* with himself.

If he is not prepared to answer these questions aright, if he cherishes false and unworthy views of himself, or permits misrule and disorder to run riot with his powers, it will doubtless be too late to win him back to self-respect and self-control. I believe that in many of our schools, both public and private, there are honest, earnest, conscientious teachers, who really care for the highest good of their pupils, and who stamp on their characters a lasting moral impress; but I also believe that we are in danger of looking more to the manner than the matter of our instruction. We need *less* art and more heart in our work, to work less by rule and more with a will, to enkindle in the hearts of our pupils aspirations for the best to which they can attain. It is not so much style that is needed, as power and heart. I am sometimes reminded of the little girl in Kentucky, who prayed, "Lord bless mamma and papa and John and Mary, and make us all stylish." A lawyer asked a little girl in Wilmington to what church her parents belonged. "We are Methodists now," she said; "but as soon as we get a new set of furniture, mother says we will join the Episcopalians." "Young men," said Gladstone to a class of theological students, "you should be ashamed that, with such a theme, there is no more feeling and enthusiasm in your preaching."

Reverence for authority, a prompt and cheerful obedience, are an important part of the moral education needed. It is the hardest lesson in life, and ought to be



one of the first learned. Our towns swarm with idle and vicious boys ; corruption in politics, bribery at elections, dishonesty in business, betrayal of trusts, crime, and vice, are not likely to be diminished, if more attention is not given to morality in the schools. Government has no right to assume the parental and formative function, and compel attendance at school, unless it first require and secure that morality be inculcated, virtue taught, the conscience educated. With much greater propriety might public farms and workshops be established where the future citizens might be trained to get their living, honestly and respectably. Too frequently no more morality is taught than is necessary for good order, and for the reputation of good disciplinary powers. The daily record of crime reveals too clearly the need of a higher and better work. The teacher reaches many whom the church cannot. He can win confidence and touch the hearts if he will use the right way, that " more excellent way." But to do this with success the teacher must understand his pupils.

In the great Estey organ works, at Brattleboro', are made from one hundred to two hundred organs a day. In the course of a year the number is enormous. Each of them is perfect, and skilful organists bring from each the same harmony. But from the divine hand come organisms of wonderful structure, each formed on a different plan, attuned to a different key ; and the skilful teacher must learn to attune each to the divine thought. Otherwise, like Guildenstern, he cannot command them to any utterance of harmony, but will only fret that which should discourse most eloquent music. He is not the true musician who merely touches the keys which answer to the written note,

but he who sees and interprets the Master's thought on the printed page and makes the organ voice them ; so he is the master teacher who discerns the germs of good, and with a skilful touch calls out the best. Intense earnestness in teaching will be successful. When a stream broadens, it is often very beautiful, but there is no power. When it gathers itself up, and pours its waters through some narrow ravine, there is where the factories are put, and there the ponderous wheels are turned.

It is related of an eminent lawyer, to whom a poor client told her story with a cold and formal precision, in words which she had committed to memory, that, after hearing her through, he said, "Madam, I don't believe a word you say." Bursting into tears, she again told her story from the fulness of her heart, when he said, "Now I believe you." The scholar will believe the earnest teacher. Truth itself is mighty, and, if presented simply and earnestly, will prevail. Truth is often darkened by much counsel. It will shine by its own light.

When Alexander said to Diogenes, "What can I do for you?" the latter replied, "Nothing, except to stand from between me and the sun." The moral power which the teacher can exert has no better illustration than the soliloquy of Tom Brown beside his master's grave in Rugby chapel: "If he could only have seen the Doctor again for one five minutes; have told him all that was in his heart, what he owed to him, how he loved and revered him, and would, by God's help, follow his steps in life and death." Such were the thoughts of the pupil, at the grave beneath the altar, of him who had opened his eyes to see that glory

of his birthright, and softened his heart till it could feel that bond which links all living souls together in one brotherhood. Could Byron — "that wild colt of the North" — have felt at Harrow the firm hand and sympathizing heart of an Arnold, might not the warm-hearted and chivalrous lad have been saved from himself?

The teacher who devotes his energies to cultivating the intellect alone, gains no such hold on the heart of his pupils, has no such power in moulding character. It is idle to shirk the responsibility, to refer it to the family and the church.

It is also the duty of these; but many a scholar is not reached by the church, and in many a family the pressure of business or the claims of society rob the child of his natural rights.

Education, then, is no narrow idea; it is the building of character. It is not the mere impartation of knowledge, nor the mere training of the intellectual faculties, but the development of the physical, mental, and moral natures into a complete symmetrical manhood.

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#### DISCUSSION.

Mr. W. A. Mowry, of Boston:—

I do not think that this ancient Institute of Instruction can do better service than to hold up before the teachers of New England this idea, that education is the building of character. It is frequently said nowadays that these schools of ours are a failure. We hear it from different classes in the community; and there seems to be a very general agreement in theory on this point, that the education of the mental powers alone, while the moral faculties are permitted to lie stagnant, to be dormant, is wholly wrong and totally inconsistent with the fundamental principle

upon which our schools rest, viz., the welfare of the community. There is a general agreement upon that point. There is a moral instinct in humanity which will never be blotted out. It has always been, it is, and always will be; and the very villain, whoever he may be, will respect character wherever he meets it. Now the schoolmaster remembers this, the schoolmistress never forgets it; and he who is fit to be in the school-room should guide his scholars into the paths that lead upward, and he has the greatest opportunity possible of anybody in the world to stamp good character on plastic minds. Now, what are the facts with reference to the American system of public schools? I hope that every member of this American Institute will have it settled and fixed in his mind and heart and soul that the American system of public schools is a system that teaches morals everywhere, as a system, as a whole, and in detail. There is no such thing as an immoral or anti-moral system of public schools in this country. In the very nature of things, the teachers of America stand high in comparison with the members of any other profession. I have no hesitation whatever in saying that, in moral character, the teachers of America are equal to any other profession you may name, be it merchants, manufacturers, farmers, doctors, lawyers, — I say it thoughtfully, reverently, — ministers. Teachers are as high morally, as a class, as a profession, as any other profession in the community. You know it, you feel it, and you see it wherever you go, from Maine to the mouth of the Columbia.

Now, the character that this profession has is its force; and it is character that breeds character, that forms character, that instils character, guides it, makes it, moulds it. This is manifest in the school-room. I hope that it will be a definite thought, fixed in all minds, — if it is not fixed in some minds now, study that it shall become so, — that the American system of schools is a system of teaching morals. History and geography come into the school-room, but morals is the atmosphere which pervades the school-room. The idea of exactness, — that which is right and correct in arithmetic, — trying to get at that which is true, — that is a moral lesson in itself. But more than that, the teaching of morals is not by law, it is not by compulsion. What is it? It is the education of the will. Then it goes to the motive; then it is inspiring; and where is there anything in this world more inspir-

ing than a true teacher in character and in action? And where is there a particular field that is more inspiring for the right and for moral principle than the teacher has? I take it, that on full investigation the American community will make up its mind that the system of American public schools is a system of teaching good morals; that, although there is an entire separation of church and state, entire freedom to worship God according to the dictates of our own consciences, that that does not mean any immorality by any means. Every individual is thrown on his own resources; he is obliged to think and decide and determine for himself, and that has given him a moral power behind all. And yet a good deal of fault is found with the American system of public schools. Why? Because it does not do everything. Mr. Willard, in his paper, mentioned one thing which it is important for us to regard a moment. They have not done all that was expected of them. There is an increase of certain crimes; *ergo*, the American school system ought to be abolished. This was not the doctrine of the paper, but it is the dictum of many a man, I fear.

You remember the story of the Goodwin Sands and the Lighthouse, and of the old fellow who thought he understood all about it. "I know," said he, "what is the cause of these sands. Why, it is that steeple house, because before that was built there was no such thing here." That is a fair specimen of this sort of logic; that is the *non sequitur* which we hear in many arguments. But we should bear in mind that in this case there are various other elements which enter into causation. Do you not have to meet the same *non sequitur* in all school matters? "Your sessions are too prolonged. I must take my daughter from the school." "What did she do last night?" "She was attending a party." "What time was she home?" "One o'clock, and she is sleepy this morning." "Had she the lesson learned?" "No." What is the cause? Where a change follows a multiplicity of circumstances, you must search very carefully to put the cause in the right place. I say to-day that there never was such an immense problem given to any nation to solve as has been given to this people. Look at it for the last twenty-five years. How many emigrants have poured into the country, landing at Castle Garden, and scattering from the Atlantic shore to the Pacific? Where do they come from? From all parts of the world, — from China and Japan,



from England, Ireland, Scotland, and Germany, and every country in Europe, Asia, and Africa. These people become assimilated and become American citizens by the thousands and millions, and they form to-day a constituent portion of the American people and of American citizenship. They are equal with the rest in a very few years; and if you go through this audience to-day, you will find some of us Irishmen, "be jabers," and some of us are of English parentage, while many of us came from Germany, and the grandfathers of us all came from some foreign land, and we are all foreigners, every one of us. This problem was given to the American people, — to take this great influx, and become the omnium-gatherum; to make of this crude material good citizens; and well has the Republic done it. There are causes for the increase of crime, and some educated communities have more of a certain sort than have the illiterate communities. I lately read this statement in a newspaper, that several colored teachers in Georgia had been convicted of forgery. *Ergo*, stop the education of the colored race. That is what some of these papers said at once. Does that follow? Why, is there a sane man, with a modicum of common-sense, who would not suppose, if you educated these ignorant freedmen down South, that some would become forgers? As soon as the colored man learns to write, he sees that a check signed by such a man is worth so much money. How easy it would be for him to sign that name, go to the bank, and get the money. Very good. What next? The man is arrested, and he says, What have I done? I have done just as that other man did, why not arrest him? But that is his name, and it is not your name. Oh, I had not thought of that! Will any of you measure the quantity of moral obliquity there was in that man? Can you tell exactly how this operated on his mind? He learned the lesson; he says, "I must not do that any more." "No, sir; and we will see to it that you shall not have the opportunity for several years to come." The other men begin to think of that, and talk among themselves, and say, "Here was Moses, and he got into state prison." And the inference is that they must not do as he did. That is the A B C of their education, and they learn it. You must bring that community up above that level. Some of them will yield to temptation on another plane, and then find that it will not answer; that it is wrong; and so by and by they will learn higher lessons in this school of morals.

There is one other thought, Mr. President, which I will express before I close, and that is, that you cannot expect everything of the public schools. If you take a city of five hundred thousand people, and have a school committee or a board of education elect the teachers for that whole mass of children for that great city, you expect that every one of those teachers is going to be the equal in ability and moral worth with the greatest names in American educational annals, — with Thomas Arnold, Dr. Taylor, President Porter, President Seelye, and President Freeman, and the other eminent names in our history. There must be a high standard, but you must not expect the very highest work in all the departments. Another thing in that connection. In the old times we had our academies, but they largely passed away, though now somewhat reviving. I wish to ask this question of this intelligent audience: if there will not be in the future some modifications by which we shall have a higher class of institutions for specific work, well established, thoroughly furnished on a distinct foundation, that shall supplement the present system. After we get to the extremity of this good system, there will be improvements as long as time lasts; and will not this great public-school system be as much better in the year 1900 than it is now, as it is better now than it was in 1850 or 1800? And if any of us should be so fortunate as to live to that time, should we not find things vastly better in the year 2000 than they are to-day? Then be hopeful, be loyal, first to the true principles of morality, but not far behind that to the American system of public schools.

PRESIDENT PATTERSON: I should like to have some member of the Institute solve the problem how to put twenty-four hours of intellectual exercise into six hours of time.

## VIII.

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### TOO MUCH OF A GOOD THING.

BY PROF. S. R. THOMPSON.

TWENTY-FIVE years ago I unexpectedly found myself charged with the supervision of some three hundred and fifty schools, about three hundred of which were in the country, and the others in the cities and villages of the same county. In going about among these schools, certain differences between the two classes strongly attracted my attention. The observations then made, and since that time verified in a wider field, seem to point to certain tendencies and results in the school work of cities, which deserve more attention than they have received. My observations were made in towns and cities of thirty thousand inhabitants or fewer. Whether the same conditions may be found in the larger cities I do not know.

The following are some of the differences referred to:

*First.* Pupils in the country schools pursuing certain studies are usually older than pupils in the city schools pursuing the same studies at the same stage. In the primary schools, this difference of age is not marked, but it increases in the higher grades. In the period covered by the last third of an ordinary graded school course, it will amount to from three to five years.

*Second.* Pupils who have advanced to the work of the upper grades by studying in the country, and who

afterwards enter their proper grade in a city school, generally show more working power, greater energy, more power of concentration, require less aid from the teacher, and will go further in overcoming obstacles by their own inherent force, than students who have come up regularly through the lower grades of the school. The country-trained pupils make more rapid progress, completing two years of the course in one more frequently than city pupils.

In the *third* place, pupils who receive their early education in country schools usually make stronger students in the colleges and universities than those trained in cities. Of course there are exceptions on both sides; but the rule is as stated.\*

The *fourth* point is, that a large majority of men in public life and in the learned professions were country born, and received their early education in country schools.

The condition of things found by the Rev. Washington Gladden in a New England city might easily be paralleled elsewhere.

Similar investigation made in a city of fifteen thousand souls, the capital of a Western State, showed that every State officer, from the governor down, two of the three judges of the Supreme Court, the judges of the United States and the State District Courts, the United States District Attorney, all but one of the professors in the State university, the mayor and town council, and two thirds of all the lawyers and leading merchants of the city, had been born and received the rudiments of their education in the country.

Just here I am reminded of a remark made to me by a Western judge, himself a fine scholar and a friend of

education. The city in which he lived prided herself on her public schools, and at this time possessed as good a corps of teachers as could be found in the country. He said, "I wish I had a good country school to send my boy to." To my surprised inquiry for his reasons, he replied, in substance, that he had observed the superior chances in life possessed by country over city boys; and though he could not clearly point out the reasons, he felt that it was an advantage on the whole to have a boy brought up in the country.

It would seem that such results as these are exactly the reverse of what might have been expected. It can not be doubted but that city schools are, as a rule, better housed, have more illustrative apparatus, are provided with more skilful teachers, are more comfortably arranged, are taught more months in the year, are under more efficient supervision; in short, are better equipped in all ways than are the country schools. Yet, with all these advantages, the pupils of the country schools, in the race of life, distance their town-bred competitors.

Now, it is not to be supposed that these things come by chance. There must be somewhere adequate reasons which, when found and understood, will account for them. Can such reasons be found?

The causes of the results spoken of are, in part at least, capable of being identified, and some may be mentioned.

1. One of the most important is the too close confinement of pupils in school in the earlier years of the course. The constraint of school at this age is felt to be particularly irksome. It is not strange that five



hours' confinement a day for ten months of the year should be thought tiresome by children. In the country the terms are rarely more than three months long, and these divided one from another by a vacation. Besides, school life in the country is more lively than life out of school; while in cities the reverse is often the fact. It is not strange that school life in towns, during the earlier years, is felt by many pupils to be monotonous.

2. By continuous attendance for ten months in the year, pupils are enabled to advance faster and further in their studies than in the country. In some respects this is an advantage; and were the minds of the children directed to such subjects or studies only as are adapted to their capacity, no harm would result. But, unfortunately, this is not always judiciously managed; and so it is not uncommon to see pupils wrestling with subjects utterly beyond their comprehension. Once out of their depth, they are literally carried along by the skill and painstaking labor of the much-enduring teacher.

Then infinitesimal lessons, constant drilling, memorizing of reasons which never touch the understanding, and surface learning become the order of the day. As a pure achievement of patient toil under difficulties, the work done at this stage, by many faithful teachers, is something remarkable.

But the results are not worthy—are utterly unworthy—of the earnest labor by which the teacher gains them. Things learned in this way do not strengthen the mind; they cripple it instead, by creating pernicious intellectual habits.

When a pupil clearly comprehends what he learns,

his mind is stimulated to a healthy activity, which in time renders mental exertion pleasant. But when intellectual tasks are beyond the ability of the learner, when they are such that he lacks maturity of mind to comprehend, his activity is enfeebled, his energy relaxed, and he is weakened instead of strengthened by such training.

In the highest class of a grammar school in a city, I once saw a teacher spend half an hour, and exhaust all his tact and skill, in the vain attempt to teach the pupils to understand the geometrical definitions of a point and a line. The pupils would average from twelve to thirteen years, and were as intelligent as pupils usually are. The difficulty was they had not reached that stage of mental development which enabled them to grasp such abstractions.

A well-known Boston boy, Ben Franklin, tells us that, when about ten years old, he utterly failed in arithmetic, though assisted by a good teacher; but that some years afterwards he found, on taking up the same subject, he was able to master it alone without difficulty.

This premature forcing of children into work too difficult for them is finely satirized by Dickens in his account of Dr. Blimber's school, where the boys were treated like hot-house flowers: "They all blew before their time, mental green peas were produced at Christmas, or an intellectual asparagus at all seasons of the year. Every description of Greek and Latin vegetable was got off the driest twigs of boys in the frostiest of circumstances."

3. Pupils in city schools usually carry on more subjects at the same time than is customary in the coun-

try. In city schools, a large number of subjects are kept abreast; in country schools, the different studies are taken up in succession, or alternated in different terms. An extreme case is remembered where a gentleman, living in one of our large Eastern cities, showed me the programme of the recitations made in the city high school by his daughter, a girl of sixteen. It appeared that she, at some time during the week, recited in nine different studies. The particular subjects are not now recalled, but rhetoric, United States history, geometry, and natural philosophy were among them. The others were of the same rank. Some were recited once a week, some twice, others three times. Such a course of study might be labelled a compendious way of producing mental dissipation. To secure power of mind or working ability by such a curriculum would be like the Gulliverian problem of extracting sunbeams from cucumbers.

4. Again, the country boy is usually trained to work steadily, continuously, and systematically at some form of manual labor. This toil, doubtless, is of great advantage to him in giving him a healthy physical development, yet it also has an important effect on his mental development. The boy who has learned to keep himself at manual labor steadily, for a considerable period of time, will carry the habit of application thus acquired over into his intellectual occupations. He has learned to work with his hands, and to continue at it till the job is done, whether the work is pleasant or otherwise; and this gives him a moral bent towards the faithful performance of intellectual tasks, which tends to make him a much more effective worker in this field than one who has not had his manual-labor experience.

Undoubtedly this early training in steady manual labor is one of the most important advantages which the country boy has over the city boy.

City-bred boys have but little opportunity to learn to work. They are kept at school so continuously that they have no chance to engage in manual labor, and thus they fail of obtaining the valuable training which such labor affords.

In estimating the weight to be given to this consideration, we must remember that habits are the result of actions rather than of knowledge. What a person does has vastly more to do with the habits he forms than what he knows.

The intellectual state of a school-boy, at any given time, is the result of two things: 1. His native, inborn constitution, what he inherits from his ancestors; and 2. The effect produced upon his habits and aptitudes by his surroundings, and the instruction he has received. It seems to me that we who are employed in the business of instruction are somewhat apt to give too much credit to education, and too little to native-born aptitudes. Doubtless some are more easily moulded by early training than others, and all are thus moulded to some extent. Yet how often do we see two brothers, born of the same parents, brought up in the same household, sent to the same school, and during all their earlier years subjected to the same influences, yet in maturity they will each differ from the other as much as two men can. Such an instance — and it is not uncommon — serves to show strongly the enduring power of inborn characteristics, as compared with the moulding power of all the educating influences with which a boy may be surrounded.

But you may say, suppose this all to be true, what are you going to do about it?

That is a question easier asked than answered. Assuming that the difficulty is real, and the causes in the main such as I have ventured to assign, it would seem that—as the physician would say—certain changes are indicated.

1. The number of subjects of study in the higher grades should be cut down till each pupil has no more than two leading studies. To these, one or two exercises, which consist principally of practice, may be added. Subjects will be pursued a term or two, and then give way to others. Thus we may allow the pupil to secure working power by concentrating his energy on a few studies at once.

2. Require the pupil to do as much work himself as possible, and restrict the help furnished by the teacher to the smallest practicable amount. Let the teacher feel that it is his business not to work for the pupil, or to lighten his task by making it easier, but simply to direct him in the best way to render his efforts more effective.

3. Do not allow the pupil to advance into work which he is too immature to comprehend. It often happens that pupils, with a good verbal memory, read through the lower readers of the course, and reach the higher, long before it is possible for them to comprehend the literature of the advanced books.

I once saw a girl four and a half years old reading in the Fifth Reader. She knew at sight and could name the words fluently, but it was obvious that she had but a nebulous conception of what she was reading about. In the better time coming, pupils will read from two to



six First Readers before they advance to the Second, and do the same with each reader of the series. This will not only make them more intelligent readers at whatever stage of advancement they may be, but will give them time to grow up with their work. They will not then, as Dr. John Brown expressed it, "be thrust out of their present selves and into the middle of next week or next year," so often as they now are.

4. In adapting school work to the younger pupils of our schools, we must distinguish more clearly what is, and what is not, fitted for their use. One point may be mentioned. We must make a sharp distinction between things which are known, and which are learned principally by study and reflection, and which from their nature require that the power of reflection and abstraction should be considerably developed, before they can be studied with profit; and those intellectual arts, or those arts which are partly manual and part intellectual, and which are largely learned by practice. These arts, like penmanship and drawing, can be acquired by diligent practice at any time during school life.

A boy of ten will be able to learn much that is permanently useful about English composition, while he may be utterly incapable of comprehending the abstractions of English grammar.

So in arithmetic, a boy may commit a large number of arithmetical facts to memory, such, for instance, as the multiplication-table and the like, while he cannot grasp the reasonings connected with the higher work in arithmetic.

By confining the boy's efforts to such things as he can master, he is insensibly led to form the habit of mastery, of working with vim, of expecting to win, of

counting on the victory in his struggles with the difficulties of school life. This habit, once formed, will be of the greatest value to him in all his future life, whether in or out of school.

These things have been mentioned first, because, while they do not strike at the root of the matter, and are rather of the nature of palliatives than cures, they may serve to mitigate the evils under consideration.

5. Some improvement in the direction indicated might be made by making the minimum school age seven instead of five. This is a reform urgently needed on all accounts.

6. A more effective measure would be to shorten about one half the hours of school for all pupils under ten years.

The same thing could be reached by cutting down the months of school from ten to six for the younger pupils.

Twenty-two years ago I was able to try an experiment of this kind, which I have since had verified more than once.

In a primary school under my supervision, one teacher had sixty or more pupils. At my suggestion the board authorized the division of this school into two grades, one to come in the forenoon and the other in the afternoon. This half-time arrangement was continued for three months. Though it was conceded that the pupils learned as much as before, though the conditions as regards health were much better than before, yet so much pressure was brought upon the board by the parents, that the half-time plan was given up. The real objection was that the children were at home more of the time, and had to be looked after by their parents,

while under the full-time plan, these little ones were for three hours more each day under the care of the teacher, and out of the way at home.

But aside from the desire which parents feel to have the children out of the way as much as possible, and which is an obstacle to the half-time plan, there is this real objection, that the half-time plan would put large numbers of boys on the streets more hours. So strongly is this point felt by many, that unless it can be met by some plan which will keep the boys out of the streets during the other three hours, there is no probability that half-time schools will ever be adopted to any considerable extent. The superintendent of a city school system once said to me, that rather than shorten the hours or diminish the number of months of school, he would increase both. He said that a majority of the pupils were better situated morally and healthfully at school than at home.

7. And finally, another solution of the problem, as far at least as it concerns the intermediate and higher grades, seems possible. This is to give the pupils some form of industrial training for a portion of each day. Such a system, once established on a practical basis, would have many advantages. It would serve to break up the monotony of continuous brain work; it would occupy the time of the pupil in an educational way, by work adapted to his capacity, till time and natural growth had fitted him for severer tasks; and it would enable him to develop and confirm solid working habits.

Manual training, rightly conducted, has the highest value as a means of developing working power. Habits of acting are developed by acting. Very much of the training in manual arts exercises the muscles strongly,

the brain and nervous organism but lightly. It thus becomes a relief from the monotony of schoolbook study.

It is too much the fashion to extol some one form of education as not only good, but the only good one. There is reason to believe that a judicious combination of various elements and appliances will secure better results than can be obtained from any one alone. It is on this principle that I look upon the introduction of industrial education as supplying an element in our general training, and one which is now lacking. It is not to supersede, but to aid the study of books. And it is because we need it, that it is coming, and coming to stay.

Gentlemen, whoever you are that think there is no intellectual education save what comes through language and books, and the time-honored and justly honored forms of school training, you would do well to consider. Education in its relation to modern industries is the great question of the hour. Education in industry, for industry, and by industry, is the new trinity which must attract its share of educational devotion, equally with the old trivium and quadrivium, and its modern modifications.

Education *in* the industries is old, education *for* the industries is new, but it has come to stay, and education *by* the industries, which for so long has done its useful, but unrecognized, work in happy country homes, must have its beneficent sway greatly extended.

## DISCUSSION.

F. F. Barrows, of Hartford : —

Admitting the facts that have been stated, let us look for the causes. Suppose country children to have the city schools and the city children to have the country schools, does any one believe that the city children would be better scholars, and that the country children would be poorer scholars, for the transfer?

My own experience with country children admitted to advanced grades in city schools is that, for want of previous systematic drill, they cannot, for a time at least, reason as well, comprehend as readily, nor concentrate their minds as closely as city pupils of the same grades. If, then, the facts stated by the speaker are not the results of the superiority of the country schools over the city schools, what are the causes? We need not go far to seek some of them. The children in the country, being free from the continual excitement of plays, operas, concerts, social parties, with their attending late hours and loss of sleep, to which the children in the city are subjected, have the needed time for meditation, reflection, and rest, so essential for correct thinking, sound opinions, and healthy bodies and minds. To be sure the city children are made bright and sharp by these attractions; particularly in social gatherings do they excel the country children; but when it comes to sound solid common-sense, the average country girl will discount her city cousin every time, not, I repeat, because of better schools, but because of more favorable conditions out of school. I admit that a poor country school has, sometimes indirectly, been the making of a young man. The boy, finding that he would receive no efficient aid from his school, has been compelled to make his own investigations, has become self-reliant, has learned to consider thoughtfully the problems of life with which he has come in contact, and for his sound judgment and stanch principles has been called to places of trust in the city, and, perchance, has been elected to positions of public responsibility.

It is also true that some city teachers are too anxious to



advance their pupils in their studies, and attempt to *do* for them that which the pupils should do for themselves, in their anxiety and kindness doing as wisely as they would do were they to eat their dinners for them.

There is failure anyway in city or country to accomplish all that is desirable to have done, but I cannot believe that any careful observer can, for a moment, desire the city schools shall be superseded by the past or present country schools.

As for manual labor, it is not so much from want of time that the city children do not labor as in the country, but for want of *work to be done*. Given the work, and time can be taken profitably from time now given to dissipation.

Dr. A. A. Miner, of Boston:—

I think an additional reason at least may be mentioned with profit to us. The whole habit of city life tends to increase, and is continually increasing, the irritability of the nervous system. With that comes a degeneration of power. This is not chargeable to the schooling, certainly not exclusively, but to the whole habit of city life, and it comes in part even from hereditary law. The parents in cities are pleased to plunge into business, to tax themselves early and late; and those who are familiar with city life will be no strangers to excuses which are often rendered even for non-attendance on church. They work so hard all the week, and often until midnight Saturday, that they are too fatigued to go to church. There is a large measure of truth in the alleged fact of pressing toil; but that it is necessary is a question. But such a practice tends strongly, more strongly than we are aware of, to the general irritability of the nervous system, which is transmitted to children. Further, the out-of-school life of the young girl of to-day is also exceedingly wearing. She has school and birthday parties, goes to the museum or theatre once a week, and attends to a dozen and one other things, in which even our churches have a responsibility,—gatherings in the vestry, bringing children out at times when they ought to be in their beds,—all tending to increase the evils under which they are born, and to multiply the varied forms of weakness and causes of degeneracy.

At the same time there is very great weight in the wise remarks

of the essayist, in respect to the question of appreciating what children go over. I was myself, Mr. President, reared in a country school, in a town which had one thousand inhabitants when I was about sixteen years old, but whose population at present is even very much less than that. I learned *a b c* at the teacher's knee, and I have been guilty of beginning to teach the children reading in that way. I have been guilty of teaching *a b ab, e b eb, i b ib*, and so on, absolutely excluding thought, and directly training them not to know anything. Let us not dream for a moment we now wholly escape from that evil. Even now the memory is taxed, and the burden of school life tends largely to repress the understanding and tax the memory. There is a multitude of things in our courses that it would be better to leave out. We spend years on details in geography, grammar, and arithmetic that better be left out all together. A little thinking on the simple elements of arithmetic; a little understanding of the simple rules of grammar continually applied by correcting the forms of speech which the children themselves employ; a little knowledge of physical geography, with the general philosophy of the globe on which we live,—letting the infinite number of capes go to the winds, and they are chiefly concerned with the winds, — would greatly limit the time we need spend on these subjects, and give the pupil all the benefit of dwelling on them, and of knowing what he is about. He should wait long enough at any given proposition to understand it, not advance a step until he understands; and if the superintendent crowds the committee or the committee the teacher, let the teacher put his elbow up, and stand on the philosophy of the case.

Just teach the parents. Though the water shall be hot at first, it will soon cool. Let the teacher feel that it is part of his work to instruct those who do not know the facts and the philosophy that appertain to the business of the school-room. I solemnly believe that it is one of the responsibilities of the teachers of this age to stand between the children and their parents and local committees and superintendents even, though wise superintendents will be easily persuaded to stand guard over the children. It is the solemn duty of teachers to protect young minds from the ravages and destructiveness of the locusts in the field of education. As a pastor of a church and familiar all my life with the field of education, a teacher in the public schools for several years, the president of a college for a dozen years, a member of the Massachusetts

Board of Education sixteen years and just entering on a new term of eight years, I stand here solemnly to say that the radical difficulty in all our educational work, and it applies in some measure to the pulpit, is the attempt to teach what is out of the range of the understanding of those with whom we are dealing. We can easily fall into a mistake in this direction. We who read on high themes readily imagine those hard words, which the young reader just now gave us with such fearful conglomeration, may be easily understood. While many of them will be understood by the brighter ones among our hearers, to a great extent we are firing over the heads of others.

The great evil of our time lies in hurrying over things not understood. The business of life is to learn to think. Not every man or woman knows how to get a fact. The main business of education is to learn where to find what we need.

Mr. Z. Richards, of Washington, D. C. :—

Many of us were guests yesterday, over at Fort Adams, and we were pleased to see forty horses draw the cannon backwards and forwards like intelligent beings. They seemed to understand the word of the officers and the sound of the trumpet a great deal better than we did. How did it happen that these horses understood so well those signals? By training. Not by one day's training, either, but by many days of training.

A few weeks ago, a gentleman came into the city with fourteen or fifteen trained horses to exhibit. Some of the most wonderful of his horses seemed to be possessed with almost human intelligence. They could answer and understand verbal directions given from their master. How was this brought about? By a long course of training, — mechanical training, I will say. I have seen minute fleas trained to perform wonderful things, — mice, bugs, and all sorts of animals, — but all trained *mechanically*. There was no intelligence, like that of human beings brought into exercise, on the part of those animals. They were trained mechanically, and it required a long period of time to accomplish the trainer's ends. I think here is the trouble with our city schools. The training is too mechanical; it takes a great while to train children to become mechanical scholars. And this is the

reason that they are obliged to spend so much more time in the city than in the country to accomplish the desired end. The boys and girls in the country are trained naturally; they see nature and come in contact with it as it is, and understand it better. The city boys are occupied by a continual course of memory training upon all the different branches of study, so that they can answer a certain number of questions and thus be promoted. Such memory work requires labor, time, and patience, — patience of the teacher and scholars. This, I believe, is all wrong. Nature should be our guide. Let children be taught naturally and not artificially. To-day we are training our children too much as if they were animals; almost all the effort in many of our schools is like training horses. Much of the time of the child in the school is now wasted; his energies are weakened; he grows up, but does not become acquainted with the principles he needs to have by him in after life. But let him develop in the country; he is there obliged to work, and he is much more likely to be intelligent when he gets into the city. The leading men and women of our nation started in the country. Find your successful men, and you discover they came from the country. There is, undoubtedly, a defect in the city training; it is too mechanical. In other words, children are required to do too much in our cities that is not calculated to develop them, to make men and form character.

## IX.

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### INFLUENCE OF WOMEN'S EDUCATION ON NATIONAL CHARACTER.

BY MISS ALICE E. FREEMAN, PRESIDENT, WELLESLEY COLLEGE.

*(Abstract.)*

THIS question is a practical one, not theoretical, not historical. The American Institute needs no arguments for higher education. Two thousand teachers are gathered here because they feel intensely the importance of the work. The only question is, how to secure this highest intelligence throughout the land. We need sometimes to be reminded, that in all the great questions before the country to-day, the moral and social elements predominate. No important discussion is going on in the world of politics and letters, no great demands are being made in society or in business, which do not involve to-day the character of the people. Hence none of them can be settled without the intelligent and continual help of the women, who are more than others the makers of the homes and the moulders of the characters of future men and women. We plunge, then, into the heart of the discussion, and ask what are the needs and the dangers of our present national development, and we shall find only one answer, — the subject of this paper, — "Influence of Women's Education on National Character."

We are charged by all other nations with indifference to our public obligations, and lack of integrity in fulfil-



ling them, with want of reverence for existing laws, with lack of courtesy in social relations, restlessness under criticism, with nervous haste in all our business and pleasures; in short, with tendencies to shallow intellectuality, toward a rich materialism.

When we remember that of the nearly half-million teachers in this country much more than half are women, the responsibility of the question increases. Said Dr. Lyman Abbott, two weeks ago, at the commencement of a girls' school: "I can conceive of a busy man declaring that he is not interested in politics, but that any woman anywhere should not be interested in politics is incomprehensible to me." Never, until all the teachers of boys and girls teach patriotism; until all the mothers know how to make the history of their fatherland more interesting than any novel around the evening lamp, — will the burden of anxious foreboding be lifted from the hearts of the best and truest men. The social questions are even, if possible, more pressing on the lives of women. To-day the jealousy between classes, the restlessness and discontent eating out the heart of home-life like a canker, call for brave hearts, firm wills, and generous spirits. A bright woman in Boston society said to a friend, last winter, that "she should never do another useful thing as long as she lived. Life was a weariness; there was no future."

I have been asked, to-day, for the practical outcome of this new movement for the higher education of women. It was said this morning that even though all this be true, there is no place now for the work of all the "highly educated women" we now have. Hardly a week passes that fathers and mothers and teachers do

not ask me whether it will pay to send some bright, ambitious girl to college. There is but one answer: If civilization pays, if education is not a mistake, if hearts and brains and souls are more than the dress they wear, then, by every interest dear to a Christian republic, by all the hope we have of building finer characters than former generations have produced, give the girls the widest and the highest and the deepest education we have dreamed of, and then regret that it is not better, broader, and deeper. Never ask, as did a New England college president, "If this girl marries, then what becomes of her education?" A beautiful woman, a professor in a prominent college, resigned her position last May to be married to a business man in a little lumber town, in the woods of a Western State. He is not a college graduate, but he has made this town a centre of good influence, and will make it a city of importance. My friend said to me when she left her work in college, "I'm going to a broader work, as the wife of a business man, in a new town, where there is no church, no school, and no library, and I want the congratulations of college presidents and professors." Never believe that there is no room for such women, while the Southern States show their record of illiteracy, while Utah's heathenism blots our civilization, while the Indians harass the West, while European pauperism flocks to the East. But let us have hope that we shall meet the demands of the foreign population, that we shall uplift the ignorance of the South, while the women and girls stand ready for the higher education, and more than ready to give as freely as they have received.

France never needed educated mothers as America needs them to-day, and France nor Europe ever real-

ized the glory of civilization which will crown our Republic when all the homes, school-rooms, and churches are filled with women as intelligent as they are loving, as broad-minded as they are large-hearted, as strong in body and mind as they have proved themselves generous in heart. The civilization of the Anglo-Saxon race in America, therefore, depends upon the education—physical, mental, moral, and social—of the women for the next fifty years.

## X.

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### AN EDUCATIONAL PARTY NEEDED.

BY HOMER B. SPRAGUE, PH. D.

PERHAPS the best description of the essential nature of our government is that formulated by President Lincoln, "a government of the people, by the people, and for the people,"—of the people, because they originated it; by the people, because they carry it on; for the people, because it exists for them alone. I am to discuss the second feature, the management of government matters *by* the people.

In New England the unit is the town, each town being a little democracy, every voter being a sovereign. Let us see what power is in the voter's hands. From time to time he must help decide by his vote, or his failure to vote, such questions as the following:—

Shall this town grant licenses for the sale of intoxicating liquors? What limit of town indebtedness shall we fix? How much money, in addition to the State and county taxes, shall we raise? Shall we carry the town debt as formerly, or fund it, or partially or wholly pay it? Shall we establish and maintain a public library? If so, at what cost? at what point? with what branches? with what books? Shall the town have a public reading-room? Shall the town bring suit to recover moneys due or claimed? Shall it make defence, if suit be brought against it? or compromise? or pay the demand? Shall the town accept a donation or bequest

made on conditions? How invest the funds? Shall it erect public bathing-houses? If so, where, and at what cost? Shall it construct water works? If yes, shall we rely on gravitation to bring the water from a distance? or shall we sink artesian wells? or pump it? What are we willing as a town to pay for reservoirs, conduits, pumps, pipes? Shall we maintain a lock-up for offenders? Shall we establish a fire department? If so, with what kind of engines, — steam, chemical, horse-power, or hand? Shall we provide hook-and-ladder apparatus? How much of this machinery? At what cost? How many firemen? At what wages? Shall we have a board of health, or shall the selectmen exercise the functions of such board? Shall the town adopt a system of sewerage or drainage? what shall it be? at what cost? or shall we run the risk of dying, like Plymouth, Pa., for want of cleanliness? Shall we establish hospitals for patients suffering from small-pox or other contagious diseases? Shall we provide, at the public expense, means of vaccination, and make it compulsory? What burial-grounds, hearses, etc., shall the town provide? where? at what cost? What schools shall the town maintain? what schoolhouses? what school furniture? How much shall we pay school teachers? Shall we maintain a high school, even if our numbers do not compel it? Shall we establish evening schools? kindergartens? Shall we train pupils in sewing or other handicraft? Shall we have a school superintendent? if so, at what salary? Shall we, at the public expense, convey pupils to school from a distance? Shall we appoint truant officers? if yes, how many? at what wages? Shall we make special provision for the care and instruction of neglected



children? Shall we establish a work-house, where the town poor may labor? Shall we build a town road here? or there? Shall we build a bridge of stone or iron or wood? at what expense? Shall we have road commissioners, or highway surveyors? What watchmen, if any, shall we provide? what police, or constables? on what wages? What rewards shall we offer for the conviction or detection of criminals? How many members of school committee shall the town have, — three, six, nine, twelve, or other multiple of three? How many assessors? Shall the town build sidewalks? where? of what kind? at what cost? Provide street lamps? Erect drinking-troughs? public fountains? Purchase or take land for town purposes? If so, where, how much, at what cost? Shall we build a town hall? of what kind, location, expense? What pounds shall the town maintain? where? Shall we contract for the publication of a town history? Shall we, by vote as a town, take stock in a railroad which is to come into our neighborhood? If so, how much stock? Shall we borrow money for the purpose? Shall we issue town bonds? if so, to what amount? at what rate of interest? when to fall due? how place them upon the market? Shall we as a town construct electric telegraphs? raise money for armories?

How many selectmen shall we elect, — three, five, seven, or nine? Shall we, by our votes, express approbation or disapprobation of the conduct of the present incumbents of the office? Let us review their action and see if they have done their duty. Have they creditably represented the town in its relations to other towns, to the county, the State, the nation, the world? I, as a voter, wish to have the following questions answered:

Have the selectmen during their term of office properly consulted the public interest in licensing sellers of intoxicating liquors? in licensing, or refusing to license, minstrel shows, theatrical entertainments, circuses, and forty other exhibitions? licensing small steamboats on town ponds or streams? licensing the use of steam engines? licensing slaughter-houses, guano factories, offensive trades? licensing billiard-rooms, bowling-alleys? licensing the storage, manufacture, sale, and use of fire-works, torpedoes, and other explosives? licensing auctioneers, pawn-brokers, children to take part in musical exhibitions? licensing innholders, common victualers, intelligence officers, junk-dealers? Have the selectmen taken proper precautions with persons suffering from contagious diseases, warning the public by flags against the infected district? Have they prudently insisted on vaccination, or re-vaccination? Have they done what they could to prevent the spread of contagious diseases among our cattle by isolating or killing the exposed or diseased animals? Have they seasonably appointed the fittest persons, in the proper number, to be sealers of weights and measures? general police? special police, to arrest tramps? skilled surveyors of marble? accurate weighers of beef, of boilers, of heavy machinery, of coal, of hay, of vessels that transport stone, gravel, etc.? honest measurers of grain, of leather? vigilant persons to seize illegal measures of charcoal? wide-awake fire-engineers, fire-wards, harbor-masters, fish-wardens? competent experts to test instruments of land surveyors? keen-eyed inspectors of milk of hay, of petroleum, of vinegar, of provisions? In case of vacancy, have they appointed a proper town clerk, *pro tempore*? town collector? probation officer?

keepers of lock-up? fence-viewers? highway surveyors? Have they bound out apprentices as the law requires? Have they provided suitable armories for the militia companies? properly summoned the militia by precept in case of need to suppress riot? so far as possible caused mobs to disperse? Have they taken the proper steps to establish a needed fire department, to organize it? to hold fire inquests, to make the annual report of fires to the insurance commissioner? Have they fairly enforced the law in regard to the taking and selling of lobsters, trout, and other fish? the law against killing birds and game? against unlawful peddling? against gaming-booths? against dangerous buildings? against unlicensed dogs? Have they rightly instituted proceedings to assess expenses fairly for flowing and irrigating cranberry lands? Have they sufficiently inspected licensed places and performances? Have they established the needed drinking-troughs, wells, or fountains? properly authorized and regulated electric telegraphs? judiciously dealt with trotting-parks and race-courses? perambulated the town lines as required by law? offered suitable rewards for the arrest and conviction of criminals? Have they in due form called meetings for the election of officers of the town, the county, the district, the State, and the nation? Have they impartially and decorously presided at those meetings? Have they promptly co-operated with the school committee in filling vacancies in that body? called meetings to fill vacancies in county offices? duly warned school-district meetings? rightly selected and laid out land for school-houses? used their influence as required by law to promote attendance at school? Have they judiciously laid out sewers and drains? wisely established or re-

fused sidewalks? fairly assessed abutters? Have they discreetly designated streets for horse or steam railways? made energetic complaint or protest against the operation of dangerous railways? insisted on protection and gates at railway crossings? judiciously consented, or refused consent, to private railways across public roads? Have they shown good sense in laying out, marking, and fencing town ways? in designating streets and highways through which other towns may bring water? authorizing aqueduct corporations or gas companies to dig up streets? ordering proper connections, conductors, pipes, hydrants, lamp-posts? authorizing the erection of telegraph poles along certain routes? regulating the passage of carriages, sleds, etc.? assigning their respective limits to highway surveyors? selecting and laying out gravel-pits and clay-pits? establishing ways to lakes, lowlands, etc.? measuring fish ponds? Have they established offices of probation? Have they provided public records and the proper storage of them in safes? Have they caused names to be put on signs at cross roads, and reported on guide-posts? Have they taken cognizance of spendthrifts, and had guardians appointed for them? Have they chosen the right men in making up the jury list, and promptly drawn jurors when required? Have they made out and posted lists of voters according to law?

These are some, but by no means all, of the duties of selectmen; and if I am a voter in a town, I am required to know, and by my vote to say, whether they have performed their work well. But there are many other town officers, some of whom have various and important functions. Surely, to vote wisely in town affairs requires much time, much patient study, wide information, some learn-

ing, large common-sense. The interests at stake are great, the questions are numerous and pressing, the consequences of misjudgment, or neglect, or selfishness, are often very grievous. To be a voter in any town is a position of no trifling responsibility. The best discipline and the broadest knowledge that school or college can give are hardly sufficient to equip one thoroughly for this task.

But still more serious is it to be a voter in a city; for here evils and evil-doers are concentrated. All the interests that require vigilance and fidelity in town government are here multiplied, magnified, intensified. The action of the individual voter in the decision of issues or the shaping of policies may not always be as direct, but it as real and as effective. The intelligence and virtue required are greater, because the difficulty and the danger are greater. I find now in the city of Boston the following standing committees of the Board of Aldermen, each committee often having under consideration interests diversified and momentous: committee on railroads, on sewers, on armories, on bridges, on electric wires, on county accounts, county buildings, licenses, street lamps, markets, paving, steam engines: the following joint standing committees of the city council: on accounts, on assessors' department, on bonds, on claims, city clerk's department, reference library, on engineer's department, on common, or ferry department, finance department, fire department, fuel, harbor department, health department, city hospital, legislative matters, cemeteries, ordinances, overseers of the poor, police department, printing, public buildings, department of education, public institutions, public lands, public library, public parks, salaries, street department,



surveyors' department, inspection of buildings, treasury department, underground wires, water department. Besides all these, there are standing committees of the common council, and special committees, and joint special committees, and nominating committees, and a vast body of officers of many kinds. This enumeration conveys but a faint idea of the multiplicity and importance of the public interests decided at the polls. Take the single department of education in Boston: think what I, by my vote or my neglect to vote, sanction or forbid. This department's affairs included during the past year, \$278,000 spent for building schoolhouses, carpentry, furniture, heating, masonry, rents, painting, glazing, whitewashing, plastering, gas-fitting, plumbing, ventilators, black boards, locks, keys, bells, roofing, iron work, grading, care of lawns, fire escapes, weatherstrips, sash elevators; it included also books, philosophical apparatus, slates, erasers, pianos, diplomas, maps, globes, car and ferry tickets, stationery, drawing materials, advertising, fuel, annual festival, salaries. Each of these items may have subdivisions, as, for instance, the last mentioned, salaries, which covers the expenditure of over \$40,000 for superintendent, supervisors, secretary, auditing clerk, assistants, copyist, messengers; over \$20,000 for truant officers, and over \$1,204,000 for teachers. A city is a gigantic business corporation, in which every citizen is a stockholder. Boston raises by taxation ten to fifteen million dollars a year, to carry on its industries. It is difficult to overestimate the importance of having the great mass of voters men of intelligence, of conscience, industry, vigilance, patriotism, business ability, scientific knowledge, book-learning even, in the management of public inter-

ests in a city like Boston: it is difficult, on the other hand, to overestimate the dangers to be apprehended from ignorance, from selfishness, from a neglect of duty on the part of voters in such a city. Just now the State Legislature has taken from the city its power of appointing its police commissioners and its thousand policemen; and while I write, an investigation is going on to ascertain whether, by some misconduct of the Water Board, the city has been swindled out of \$50,000 or more.

Besides these, there are county interests of importance to be looked after,—county roads, county jails, sheriffs, court-houses, county commissioners, and other county matters,—which it would be suicidal or criminal to ignore or mismanage.

But these duties which a man owes, these rights which he possesses, as connected with his town, his city, and his county, vast and varied and vital as they are, are slight compared with those which arise from his connection with the State. I must not even read the enumeration—it would take hours to do it—of the rights, powers, duties, the privileges and responsibilities of a citizen of a State, as laid down in the Bill of Rights, the Constitution, and the index to the printed laws. But the unwritten laws, the rules and usages that have the force of laws and that control in the administration of justice, are more numerous and extensive than the printed statutes. The State's protecting arms are everywhere, her voice may be heard every instant by him who has ears to hear; her vigilance is unsleeping, her hands are un-resting.

Now consider that it is a fundamental principle in all public and private affairs that every man is presumed to know the law, *Ignorantia juris non excusat*. You must

take notice of the law at your peril. I repeat: the structure of our government from its foundations to its turrets, all through its thousand departments and sub-departments, with all its complicated machinery and the function of every portion, are assumed to be thoroughly known by every person who has come to years of discretion. Every provision is liable to come up for consideration, revision, or application, directly or indirectly, in the Legislature, in the courts, in daily life, or at the polls. I have mentioned the fact that the Massachusetts Legislature, at its session just ended, made a radical change in the appointment of the police authorities of the city of Boston. It was but one of many important measures; among which may be mentioned the great change in the city charter, concentrating power and responsibility in the hands of the mayor; the initial steps to amend the State Constitution so as to provide for biennial instead of annual elections of State officers, and biennial instead of annual sessions of the Legislature; the limitation of municipal expenditures; the refusal to exempt ex-soldiers from the operation of the civil-service rules; the refusal to permit school committees to extend the tenure of office of teachers beyond one year; the second stage of the process of amending the State Constitution so as to permit more than one voting place in a town; action of moment in regard to the public health, illiteracy, evening schools, water supply, insurance companies, railways, etc.; the fitness and the conduct of every one of the great army of office-holders, — these, too, in theory at least, pass in review, and are approved or disallowed by the action or inaction of the voter. So that the happiness of every man, woman, and child in the Commonwealth is in some measure

committed to his hands. The government is on his shoulder. Watch the proceedings in the Legislature, in the tribunals of justice, in the execution or non-execution of the laws, or the issues involved in State elections, and you are filled with amazement at the multiplicity and the importance of the matters on which you and I and every voter must pass judgment. How tremendous the responsibility devolved upon us by our fathers who founded this government "*by the people*"! To be ignorant of these obligations and powers is a shame; to be neglectful of them is a crime.

But more important still, as fifty-five millions are more important than five millions or one million, is the business of the nation. This, too, is in the control of the voters, and may depend upon a single ballot. The transfer of five hundred ballots in the State of New York from the Democratic to the Republican party in the last Presidential election would have given us a different administration, a different set of officers, a different policy for the next four years, and in this issue might have been involved, perhaps was involved, the happiness or misery, the wealth or poverty, the honor or shame, of multitudes almost too vast for computation, the seeds of national prosperity or misfortune for a century to come. Every vote must influence the control of the government; every failure to vote must have its effect on public policy. Issues almost innumerable, some of them of appalling magnitude, are sure to arise; and woe to us, and to our children, and to our country, and to all mankind, if those decisions which the majority make or permit to be made are wrong.

And this is not all. "Above all nations is humanity," is the aphorism of Goldwin Smith carved on stone and

read of all passers-by on the slope of the hill on which Cornell University stands. The facilities for intercommunication by steam and by electricity are every year bringing the peoples nearer each other. We touch hands across seas and continents. We look every nation in the face, we speak with all ; we deal with all, and our dealings come home to every man. On the first day of this month expired the treaty with Great Britain, which permitted American fisheries in British waters on the Atlantic coast ; a business which employs two thousand vessels and thirty thousand men, and brings food to every man's table. Our tariff duty of two cents a pound on all imported sugar, the source of about one third of all our revenue, is paid by almost every family in the land, Extradition of criminals, expatriation, commerce, peace, war, — these are involved, with all that the words imply. The act of a single individual like Martin Kosta, or O'Donovan Rossa, or Chinese Gordon, or Captain Wilkes, may embroil nations, and save or destroy thousands of lives and millions of money, as the lighting of a match may kindle a furnace or explode a mine.

Now what happens if the average voter is short-sighted, narrow-minded, or unscrupulous in town, city, county, State, national, or international matters ? The public is swindled ; your taxes are quadrupled, yea, increased beyond the point of endurance ; the State repudiates its just debts and stands a gigantic fraud in sight of all the world ; the good name of your people is befouled ; your friend is made a drunkard ; your son is ruined by gamblers ; you are driven out of your own house by the establishment of dens of ill-fame in your neighborhood ; your prisons and almshouses are filled to overflowing ; your liberties are wrested from you ; your land



is ravaged ; your streets are barricaded ; you are shot or stabbed or killed with a bludgeon ; your house is pillaged ; your public buildings are blown up with dynamite ; your city is burned by savage mobs or hostile armies. But why draw on the imagination ? At this moment, while I write, Chicago is trembling on the verge of insurrection ; muskets and bayonets are despatched in hot haste to the stables of the street railways ; four hundred policemen, heavily armed, are concentrated at one point ; travel and business are largely suspended ; life and property are not safe, and we shrink appalled from what may be ! For we know what has been in Pittsburgh, in Cincinnati, in Paris. A mistake on the part of our ignorant millions as to the relative rights of State and nation, combined with the ambition of a score of politicians, brought on our civil war, sweeping into nothingness ten thousand million dollars, destroying eight hundred thousand of the flower of American youth and manhood, filling the nation with mourning, and opening the floodgates of crime. A vast number, perhaps the majority, in the South, still think that they were in the right in that struggle, and that they were simply overborne by superior force. A multitude of such would try it again, if they thought there was a strong probability of success. Examine these evils which lovers of their country most deplore ; nine times out of ten are they not the result of ignorance or selfishness, or both, — evils wickedly planned or stupidly permitted by vast numbers of voters ? Have you read that startling brochure, published within the last few weeks, "The Fall of the Great Republic" ? It shows how the causes now known to be powerfully active might ruin the nation. It purports to have been

written in 1895, and it reads like a prophet's vision. It points out the pent-up volcanic forces at work among the masses of our countrymen believing themselves to be ground down by oppression; or goaded on by intemperate factions, by secret societies, by the failure of justice, by malice, or intoxication, or clannishness, or instinctive hatred of a foreign land, or by cunning, or ambition, or avarice, or lawlessness, or lust, or hunger, or gigantic frauds, or religious bigotry, or by all these combined.

Ah, if suffrage could be restricted to the wise, the vigilant, the good! But it cannot be. The sceptre is in the hands of the ignorant, the thoughtless, the vicious, and nothing but a bloodier revolution than the world has yet seen, destroying the central principles of our government that the majority must rule, can wrest it from them. Ex-President White, of Cornell University, proposed to limit the government of our great cities in all financial matters to property-holders, as in Berlin. He who should seriously attempt such a restriction would be torn in pieces by the mob which he would disfranchise. It cannot be.

Nor will political matters take care of themselves. This is not a government by chance, but by the people. If not wise and good themselves, will they make proper selection of officers, favor right measures, oppose follies and iniquities? There is a peculiar tendency among the unthinking in a popular government to take the law into their own hands; for they see how laws are made and unmade, what low and absurd motives sometimes actuate legislators, and they conclude that law is a mere human contrivance, destitute of divine sanction. Are there not a million law-makers, that is,

voters, in America to-day, that neither know nor care what the statute decrees, provided they are left in ease to make money or indulge in pleasure? What to them are tariffs, or civil-service reform, or the rights of men in far-off states, or the schemes of dynamiters, or polygamy in Utah, or mob rule in Pittsburgh or Cincinnati or Chicago or Cleveland?

If mere obedience were the only duty, as in an absolute despotism, a little political knowledge would suffice; but these creatures, some of them hardly above the level of ox-hood, must govern as well as obey; govern their towns, their cities, their States, the nation! govern their betters! and it cannot be otherwise.

There is one means of safety, and only one, — the most thorough instruction and training of every child. Perhaps the Republic may last long enough to apply this remedy in the next generation. I trust that it is not too late. I look for a great educational awakening.

What kind of education should every voter have? First, last, and always, political education, built upon the foundation of sound common-sense and enlightened conscience. He must know his rights; he must feel and perform his duties; he must love his country.

Conceive of a perfect governor. He knows human nature thoroughly. He is deeply versed in the philosophy of history. In his memory lie, like paths of light, the careers of the great governments in past centuries. He knows the history of liberty, each pillar and arch and buttress of the great temple of freedom, and how they have been cemented with the best blood of the race. Especially is he familiar with every phase of the past and present life of his own country, its prominent men, its principles, and its parties. Nothing that bears

upon political or social science escapes his apprehension, or misleads his judgment, or baffles his action. His arm is as strong, his heart as warm, his conscience as keen, as his intellect is piercing and comprehensive. Add to this a familiar acquaintance with common business; the ability of prompt action; the faculty of ready, clear, concise speech; skill in parliamentary affairs, tact in the management of men; knowledge of all those branches of learning and applied science that are called into play in the transaction of public business. Crown him as a loyal son of the great King! This is our ideal governor; this is our ideal voter. To the measure of the stature of this perfect citizenship every man ought to come. The essential nature of our government requires nothing less. Unless a clear majority of voters are brought somewhere near the attainment of this goal, our liberties are not safe.

How shall this ideal be measurably attained?

The church cannot do it. The mission of the church is to pierce to the centre of the heart, and to plant there a principle of divine life that shall go on expanding forever. No words can express the importance or the sacredness of that work; but the thousand-fold matters of citizenship are and must be left to other hands.

Equally impossible is it for the Sunday school. With all its amazing growth and its wondrous possibilities, it meets the child but one hour a week, — one hour out of seven days, — and, in this matter of citizenship, it cannot reach with directing, enlightening power half the young.

Private schools and parish schools may help; but their resources, their scope, their cost, and the estima-

tion in which they are held by many, alike render them inadequate to mould the masses.

Colleges and universities, light-houses high above the sea of common humanity, are utterly helpless to stay the incoming tides of ignorance; utterly helpless to guide or still the storms that rage beneath and around.

Parents, in the great majority of instances, are wholly incapable by reason of pre-occupation, or lack of intellectual and moral equipment, — blind leaders of the blind.

But there is one instrumentality through which the desired results may be attained. It is an American invention, the capacity of which has been but partially shown, but which possesses immeasurably more power than we have been accustomed to think. It can reach nearly every child, and every youth, three to six hours a day, five or six days a week, and keep its hold upon him from the age of four or five to sixteen or eighteen. Never was machinery more happily devised to accomplish any result than the public school system of New England to produce enlightened and conscientious voters. With a few adjustments easily made, a definite purpose persistently pursued, and a period of instruction reasonably prolonged, the great majority of young Americans can be made wise and good citizens.

And this is, or ought to be, the great object aimed at in the public schools. It is demonstrable that the founders of New England established its school system for this very end; not to enable men to earn a livelihood, but to qualify them for citizenship; not to help them to make money, or shine in professions, or to become skilled mechanics, prudent farmers, bold sailors, shrewd lawyers, accurate accountants, but to be capa-



ble and virtuous members of the body politic, to manage wisely public affairs; in the language of Milton, "to perform justly, skilfully, and magnanimously all the offices, public and private, of peace and war." I repeat, the great need of this country and the fundamental idea of the public school system are identical; viz., political education, the training up of the masses in youth to be intelligent, honest, and patriotic participators in public business. This harvest fully assured, the more superadded conveniences and accomplishments the better; failing of this, all else is chaff.

The true test of every study and every exercise in the public schools is this: is it, on the whole, the best thing for the pupils, along with other means, to make them clear-headed, true-hearted, God-fearing, energetic lovers of their country? Among different courses or branches the question should be, which will give the best preparation for exalted citizenship? not, which best fits them to get a living? The living will take care of itself, if body, intellect, and conscience are rightly trained for their country's service.

We see the result to be aimed at. Its attainment probably involves daily drill and study, consciously directed to this end, through about ten years, — six years of the grammar school, four years of the high school.

Shall we be told that the curriculum in the public schools is crowded already, and no space can be found for special instruction in citizenship? The answer is, space must be found. The branches not essential to civil rights and duties must be cut down and cut out remorselessly, and those that bear but remotely must give way to those that bear directly. With teachers

sufficient in number and in power, perhaps none of the usual branches need be wholly omitted. Every one of them is of positive value in contributing to intelligent action in public business. General Butler thought astronomy of remote utility in high schools; but some knowledge of it might be necessary in surveying public lands, fixing territorial boundaries, establishing legal time, sailing government ships as well as the general's yacht. But if necessary to make room for the central business of the public schools, let it be omitted for a time, with psychology, chemistry, geology, book-keeping, zoölogy, physiology, botany, Latin, French, German, mediæval history, English literature, physical geography, music, and drawing. By and by, with more competent or more numerous teachers, and with better methods, room will be found for all these subjects of study, and they will all help to make good citizens.

Shall we be told that we cannot keep pupils in school to the age of sixteen or eighteen; that parents must have the earnings of boys and girls, and cannot rightly be compelled to give them more than a primary or grammar school education, nor even that? Granted that compulsory education to this extent is neither desirable nor possible; yet it does not follow that the great majority cannot have a secondary education. The town, the city, the State, or best of all, the nation, can make it easy for parents to dispense with the wages that might be earned by the young. How? The nation can hold out pecuniary inducements sufficient to compensate parents for such loss of service and income. Suppose that the nation should pay a premium of fifty or a hundred dollars to the parent on the completion by the pupil of a year of successful work in the high school.

with unexceptionable behavior and good scholarship. Who does not see that with such an attraction there would be little need either of those compulsory attendance laws which sometimes work cruel injustice, or of those expensive truant officers whose interference is so often resented as a disgrace? To draw the young into the schools, to fill them with gratitude to their country, to insure perfect deportment and earnest study, and to hold them faithful to the end, what inducement would be equal to this? It would ere long bring into the high school nine tenths of all children of proper age; and the Sphinx enigma, on whose unravelling hangs political life or death, how to make the majority of voters wise and good, would be gloriously solved.

Shall we be told that tax-payers will never consent to the payment of many millions of dollars annually for such a purpose, that the burden would be too heavy to bear? We may answer that the nation is rich; and from its surplus revenue, which, after all, is mainly paid by the laborer, it can bestow such rewards of merit, and no man feel the burden at all; and further, that the consequent prevention of costly crimes and avoidance of costly blunders will naturally reduce taxation far below its present limit; that it will end a hundred "penny-wise and pound-foolish" policies that now prevail; that, in short, this high general education is indispensable to true economy.

Shall we be told that this secondary instruction will unfit the young to work with their hands? that it will make them disdain humble toil? that it will withdraw them from the kitchen, the laundry, and the barn-yard? Alas, is it so? Will they revere no more the cook-stove, the wash-tub, and the dung-fork? Peace, troubled soul!

the contrary is the fact. If the educated man or woman can work more efficiently for the common good in some other way than by performing the humblest toil, in Heaven's name be it so. But it is not true that a good education makes the lowliest labor disreputable. Rather, it glorifies toil, it crowns with honor the workingman. And the better the education, the better the work. Rip Van Winkle will find, when he wakes, that the system of apprenticeship in America has nearly disappeared, and what is wanted in workshop or factory now is not manual dexterity acquired by years of training in the use of tools, but higher intellect and broader knowledge, to superintend machinery and utilize the forces of nature.

Shall we be told that this offering of vast sums as bounties to improve the education of the common people is a step toward communism? We may answer, that, if there is an element of justice in the demands of communism, the sooner we recognize and render that justice the better. Whatever foundation of right there is in the claims of land-leaguers, socialists, nihilists; in Licinian rogations; in the doctrines of those who, like Henry George, would have the government confiscate all lands, or like Proudhon, would forbid private property altogether,—and without some basis of right these theories would never become formidable,—would largely be satisfied by this mental and moral culture given to the laborer's children in return for the material value created by his hands. Well says Carlyle, "If the poor toil that we may have daily bread, shall not the high and mighty toil for him in return, that he may have light and guidance, freedom, immortality?" Such payment in the form of universal high education for value received would be something more than poetic justice; it

would bind with links of gold the rich and the poor together and all to the state.

Shall we be told that the public school system is deficient in the means of moral instruction? We may answer that it is the universal testimony of those who have most thoroughly inspected and observed the schools, that the great majority of teachers are upright, conscientious, painstaking men and women, under the influence of whose example it is good for children and youth to be; that their average character generally surpasses in moral worth that of the average men and women with whom the young are brought in contact outside the school-room; and further, that there usually is, in the very spirit of the studies and discipline, and pervading the very atmosphere of the place, a wholesome-elevating, and purifying influence; so that in fact, unless, circumstances are extraordinarily unpropitious, young persons become better the longer they stay, growing in grace as they grow in years. In this connection let us not forget that perhaps the most dangerous age in morals is from twelve to sixteen or seventeen years; and that the ennobling thoughts, the inspiring topics, the delightful and absorbing studies which the public schools present to pupils of that age are the best guarantee and safeguard against the inroads of vice and the temptations to incipient crime.

Shall we be told that education is a local or State affair, with which the central, the national government has nothing to do? We may answer that if the nation has a right to live, it has a right to the means of life, and that a sufficient education of the people is of all means most indispensable. We might quote the preamble to the Constitution, and show that every one of the great



objects enumerated there makes such distribution of national funds legitimate, whether it be to form a more perfect union, to establish justice, insure domestic tranquillity, provide for the common defence, promote the general welfare, or secure the blessings of liberty. We might cite the language of Washington in his Farewell Address, "Promote, then, as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened." We might adduce the fact that Washington favored the establishment of a national university. But more than all these, we have an unquestionable precedent in the action of Congress in 1863, whereby millions of acres of the choicest public lands were donated to those States that should establish colleges in which, among other branches of learning and science, agriculture and military tactics should be taught.

Shall we be told, finally, that the distribution of so vast sums annua'ly would give rise to a swarm of new officers, and become a prolific source of danger and corruption? We may answer that in the national Bureau of Education, in the State boards of education, and in the county, town, and city school committees, we already have a nearly perfect machinery, adequate to the arrangement of all details, the preparation and conduct of all needful inspections, examinations, and other tests, and to the just distribution of such awards.

How then shall this expansion of the system of public education be secured? By the American method, — the formation of a new political party. I see no other way. Any man in this country can establish a church

or a party; but of one thing we may be sure, never was religious creed or political platform so attractive to the laboring man as this. Such party might be small at first, feeble as the anti-slavery party fifty-five years ago, numbering but one man. It would be a party of one idea, it is true; all the better, for that idea is so grand and comprehensive as to include within itself the germs, the promise and potency of all possible political and social progress. And this is the platform: *A high-school education, made possible for every child by the munificence of the nation!* What parent, what patriot, but would join a party like that?

The hour is auspicious. Old issues have either died away, or both the great political parties have substantially adopted the same views. The cause of temperance might afford a sufficient party basis; but the strenuous efforts of the noblest men and women, for the last forty years, have not availed to rally to their support any large proportion of the voting population; and if prohibition by constitutional amendment were carried, it would not destroy intemperance. Every thirsty man would set up his little private distillery. No; the evil lies deeper. The manufacture and sale of intoxicating drinks are but an outward symptom of an inward disease, sure to break out in some form. But make the intellect clear, the conscience keen, and the love of country ardent in all the young, and both cause and effect will be eradicated, and drunkenness and a hundred other evils vanish like morning mist.

It was the last utterance of the old Hebrew prophets, the concluding verse of the Old Testament Scriptures, "He shall turn the heart of the fathers to the children, and the heart of the children to their fathers, lest I come

and smite the earth with a curse." So, ere it is too late, may the hearts of American fathers be turned wisely to the higher education of their children; and so may the hearts of American youth be turned reverently to the toils, the sacrifices, the precepts and principles of the fathers, lest an avenging Providence smite with the curse of anarchy or of despotism this fairest of fair lands!

## XI.

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### HORACE MANN: HIS LIFE AND EXAMPLE.

BY AMOS HADLEY, PH. D., CONCORD, N. H.

[The author of the following Lecture here acknowledges his obligations to that excellent biography, "Life of Horace Mann. By his Wife." Second edition. Boston, 1865. Most of the indicated quotations are from that work.]

ONE night in the latter part of June, 1837, a man sat alone in his "upper room," in Boston, writing in his journal. That room was his office and bedchamber. There he had labored "long" and "severely," and "had brought some things to pass." There, withal, he had spent "many disconsolate days," many "sleepless and tearful nights"; for ill-health, misfortune, and affliction had visited him, — but not to drive away purpose, faith, and honor, still abiding to sustain him.

His was the head generously gifted and cultured; his the heart "strong and brave," yet tender and sensitive; his the hand mighty in toil, and unfailingly executing the harshest decrees of an exacting and iron will. He had the eloquent tongue; he wielded the ready, powerful pen; truth spoken or written by him never lacked the effectiveness of appropriate expression: for his fine imagination gave his sturdy logic full permit to be equipped with what might be fittest in the

whole bright armory of rhetoric. Gifted thus with the power of conviction and persuasion in the cause of truth, and warmed with a whole-souled enthusiasm, he was "a radiant man,"—as one of his friends has called him,—the magnetic centre of an ever-enlarging circle of personal influence.

Forty-one years of rain and shine had matured his manhood. Silver, not of time alone, nor chiefly, was in his hair. Nobility of nature was indexed in the "high-arching head and massive brow"; in the mild bright eye; indeed, in the whole countenance, fine and firm of lineament, and on which the light of the genial relieved the shade of the sedate.

But what wrote that man there in the "still watches" of that June night? These are the words that flowed from his busy pen:—

I cannot say that this day is one to which I have *not* looked forward with deep anxiety. The chance of being offered a station which would change the whole course of my action, and, consequently, of my duties, through life, was not to be regarded with indifference. The deep feeling of interest was heightened by the reflection, that, in case of my receiving the appointment of Secretary of the Board of Education, my sphere of possible usefulness would be indefinitely enlarged, and that my failure would forever force into contrast, the noble duty, and the inadequate discharge of it. The day is past. I have received the offer. The path of usefulness is opened before me. My present purpose is to enter into it. Few undertakings, according to my appreciation of it, have been greater. I know of none which may be more fruitful in beneficent results. God grant me an annihilation of selfishness, a mind of wisdom, a heart of benevolence. A new fountain may now be opened. Let me strive to direct its course in such a manner, that if, when I have departed from life, I may still be permitted to witness its course, I may behold it broadening and deepening in an everlasting progression of virtue and happiness.



So wrote HORACE MANN. So communed he searchingly with himself; so reverently appreciative of duty, and with piercing gaze into the future, even beyond the shores of time, accepted he the trust of an untried and difficult position. The spirit with which he entered upon his new work was, of itself, prophetic assurance of success. What manner of spirit it was, he forcibly depicted, years afterward, in declaring: "When I left a lucrative profession for the Secretaryship, I cheerfully surrendered all hopes of wealth or promotion; and, from the day when I accepted the office, I held myself *personally responsible* for the success of the enterprise; and though it might cost me my means, my health, my life, or a hundred lives, if I had them, I held the triumph of the cause to be paramount to them all."

"Providence helps those who help themselves," says Dr. Franklin, in wise deduction, verified in the careers of the world's greatest and best, and in the life of any one hardly more strikingly than in that of HORACE MANN, who, on the 4th of May, 1796, was born in the Massachusetts town which bears the philosopher's name. He was a farmer's son. This farmer, a man "of moral worth, and love of knowledge,"—as characterized by the son's biographer,—dying early, left to his young children, not wealth, but a treasure, priceless beyond gold,—a noble, pious, devoted mother. That home, in its sacred influence, was a perpetual answer to the prayer, "Lead us not into temptation, but deliver us from evil." Puritan "traditions of integrity and honor" were cherished, Puritan virtues nourished, beneath that modest roof-tree. The "love of knowledge" was there "intensified" in young hearts, by parental lips, and "learning and learned men" were always spoken of

"with enthusiasm and a kind of reverence." There, too, were taught—practically taught—the lessons of industry and self-help; for there was more work than play. HORACE, with something of the tone of dutiful protest, says, in describing his early days:—

I believe in the rugged nursing of Toil; but she nursed *me* too much. I do not remember the time when I began to work. Even my play-days—not *play-days*, for I never had any, but my *play-hours*—were earned by extra exertions, finishing tasks early to gain a little leisure for boyish sports. I have derived one compensation, however, from the rigor of my early lot. Industry or diligence became my second nature, and I think it would puzzle any psychologist to tell where it joined on to the first. Owing to these ingrained habits, work has always been to me what water is to a fish. I have wondered a thousand times to hear people say, "I don't like this business"; or, "I wish I could exchange for that"; for with me, whenever I have had anything to do, I do not remember ever to have demurred, but have always set about it like a fatalist; and it was as sure to be done, as the sun is to set.

The boy had his deprivations. He loved books. He needed them, and "braided straw" to get them. The few household volumes "were taken care of as though there was something sacred about them." The small town library, though the gift of Franklin himself, was, in its selection of "old histories and theologies," "better suited to the taste of the 'conscript fathers' of the town" than "adapted to the 'proscript' children."

Until the age of fifteen, he "had never been to school more than eight or ten weeks in a year"; and it was not at a very early period in life that "the idea that he could ever study Latin broke upon his mind with the wonder and bewilderment of a revelation." His little school instruction was but indifferent. Of this he says:—

With the infinite universe around us, all ready to be daguerreotyped upon our souls, we were never placed at the right focus to receive its glorious images. I had an intense natural love of beauty, and of its expression in nature and in the fine arts. As "a poet was in Murray lost," so at least an amateur poet, if not an artist, was lost in me. How often, when a boy, did I stop, like Akenside's hind, to gaze at the glorious sunset, and lie down upon my back at night on the earth to look at the heavens! Yet, with all our senses and our faculties glowing and receptive, how little were we taught! or, rather, how much obstruction was thrust in between us and Nature's teachings! Our eyes were never trained to distinguish forms and colors. Our ears were strangers to music. So far from being taught the art of drawing, which is a beautiful language by itself, I well remember that when the impulse to express in pictures what I could not express in words was so strong that, as Cowper says, it tingled down to my fingers, then my knuckles were rapped with the heavy ruler of the teacher, or cut with his rod, so that an artificial tingling soon drove away the natural.

Though intellectually hindered by lack of good books, and by scanty school attendance, and though sorely victimized by poor teaching, yet was he not paralyzed thereby; on the contrary, he felt therefrom *the tingle of reform* all through him. What, in his manhood, did he not do "to scatter libraries over the whole land, as the sower sows the wheat-field," by placing a well-filled alcove in every school-room? What did he not do, to make knowledge prevalent as the sure foundation of that *competence* which could afford children due time and opportunity for school attendance? What did he not do, to have the common school supported by generous pecuniary allowance, and, by this and other means, its year duly lengthened, and its powers enlarged by wise gradation, thus enabling every child in the land to quaff tempting draughts

of higher and more liberal instruction? What did he not do, that school instruction might recognize education to be the orderly, symmetrical, and harmonious development and cultivation of all the God-given faculties of the complex human being, and so recognizing might adopt the means and modes most promotive of the great end?

This "charming merry child," as he has been called, had "a fund of humor and sparkling wit" which, when he became a man, he lost not. It glowed "in the child-like playfulness into which he always fell with children"; it brightened his conversation and correspondence, and not infrequently relieved with brilliant flashes even his more serious efforts of thought and speech.

This earnest, thoughtful child "early formed the resolution to be a slave to no habit," and so well did he keep it, that he could truthfully say: "Whatever may have been my shortcomings, I have always been exempt from what may be called common vices"; meaning profanity, the use of intoxicants, or the vile weed.

This sensitive, conscientious child had his sorrows, the deepest of which, he tells us, grew out of "theological inculcations." Certain "hypercalvinistic" doctrines terrified his young soul, "spreading," as he says, "a pall of blackness over the whole heavens, shutting out every beautiful and glorious thing"; and yet, "what seemed to" him "most deplorable in the retrospect, all these fears and sufferings had never prompted to a single good action, or had the slightest efficacy in deterring from a bad one." In describing this experience, he says: —

I remained in this condition of mind until I was twelve years of age, . . . when, in an agony of despair, I broke the spell that had bound me. From that day I began to construct the theory of Christian ethics and doctrine respecting virtue and vice, rewards and penalties, time and eternity, God and his providence, which, with such modifications as advancing age and a wider vision must impart, I still retain, and out of which my life has flowed.

Was not that life all the fuller and grander in its propitious flow, for the dark clouds that nursed its sources? Certainly, in view of such an experience, we shall neither be surprised, nor fail to be touched with sympathetic admiration, when told by his biographer, how he, when himself a father, "aimed to cultivate the religious character of his children, irrespective of dogmas"; how "it was the happiest of thoughts to him that his children could make God a sharer of their joys, and an object of personal affection and confidence"; and how "tears of joy relieved" the father's anxiety, when he perceived that his little son, while contemplating with him "the mysterious evolution" of the insect "from the chrysalis," gave "with heart and intellect, a recognizing consent to the conception of a loving heavenly Parent who made father, mother, and the butterfly"; and that "terror" was not, as it had been in the case of "his own young heart," the "first emotion excited by the knowledge of God."

In the charmed retiracy of his country home, the child had become a youth, and was now waxing into a pure, strong manhood. "All his boyish castles in the air," we are told, "had had reference to doing something for the benefit of mankind." His youthful aspirations had solid foundation in a noble nature, rightly nurtured in reverence for knowledge as the needed instrument of



efficient well-doing. In the baptism of a wise mother's love, the spirit of benevolence had rested upon him "like a dove." That mother's hand was now to place in his the banner whose device was "Love to Man a test of Love to God" He was now to take it, and as he should bear it, with its conquering sign, steadily aloft in the coming years, well might he be constrained, as constrained he was, — on revisiting the old homestead, — to exclaim in reverent memory, "My mother, . . . whom I not only remember, but of whom, so far as I have any good in me, *I am!*"

Twenty years of life had passed, and, at length, that "inward voice" which "raised forever its plaint" for higher knowledge, could receive satisfying answer. The young man has entered upon classical study in the course preparatory for college. But the course has hardly been entered, ere it has been run, by the eager athlete. In six months from commencing the study of the Latin, he is a sophomore in Brown University. Here his wonted intensity slackens not; he overcomes all disadvantages; he takes the foremost place in his class; and, in the "First Part" assigned him at graduation, prefigures, upon the commencement stage of 1819, in his oration "on the progressive character of human nature," the "first honors" that should yet be won in a life-course of philanthropy.

To be sure, the intensity of preparatory and collegiate study was a strain upon physical energy, that wrought insecurity of health, and entailed more or less of suffering in after life. He, however, was led by physical pains to a thorough study of the laws of health, and when he thoroughly knew them, he so strictly observed them, that he was enabled to baffle ill-

health to a good degree, and to be "the terrible worker" he ever was. His only disobedience to hygienic laws was in the matter of over-work, and this he would fain justify on the plea that he had labors worthy of being accomplished, even at the expense of life itself. Whatever of the illogical may be found in this plea, we can afford to overlook, as well in view of the great achievement allowed by it in this instance, as of the little danger that the self-sacrifice thus excused will become too generally prevalent in an ease-loving world. Moreover, his generous nature drew inspiration, even from its own bodily torture, to inculcate and disseminate a knowledge of the divine structure of man's physical organism, and of the divinely sanctioned laws of its healthy growth and action. It prompted him to put forth, by voice and pen, effective efforts to direct the coming generations in the pleasant ways of health, thus enabling him to transmute even the twinge of neuralgia into a public blessing.

Having served awhile as tutor in the college, and having completed his course of professional study, Mr. Mann entered the practice of the law, in which, with residence, first in Dedham, and then in Boston, he continued for fourteen years. He was a successful lawyer, albeit an honest one. His "profession," he has said, "treated him quite as well as he deserved." His biographer has recorded of him, that "he never yielded to the temptation to defend the wrong. He had adopted the principle, from the beginning, never to put himself on the unjust side of any cause, even for intellectual gladiatorship and practice." But being on the right side, no man ever worked harder "to get his case." Eighteen hours a day were not too many for him to

spend habitually in the interest of honest clients and in behalf of just causes. In his arguments as an advocate, he sought not to "make the worse appear the better reason"; he loved Truth too well to do that; he would not that she be slain, or even wounded, in the house of Themis. He held that, "in the conscious conviction of right, there was a magnetism, and he only wanted an opportunity to be put in communication with a jury, in order to impregnate them with his own belief." Jurors came to have confidence in him, and, with uncommon frequency, found "the law and evidence" to be upon his side. He won "in four out of five of all the contested cases in which he was engaged during his fourteen years of forensic practice."

It was at this period of his life that he served in the State Legislature, and for some years presided in the Senate. He was a progressive legislator. He was a supporter and, in some instances, the originator of measures of philanthropy and moral reform. He was an earnest advocate of religious freedom and educational improvement. His thought took broad range and was not without wise forecast; for a speech of his in favor of railroads—then a suspicious novelty—was one of the first and best ever made in this country. But were his legislative career without other record of excellent achievement, the hospital for the insane at Worcester with its heavenly "ministries to mind diseased," and with its blessed infection of worthy example in the establishment of like institutions in the land, would sufficiently insure HORACE MANN'S fame as an enlightened, beneficent legislator.

Now, also, crushing trial and affliction befell him. The light of his home, a lovely being, who, a child,—

daughter of the president, — had been loved by him, a man in college, and who had grown into sweet but fragile womanhood, and into his great and affectionate heart, as the more than half of his being, — this light suddenly went out in death, and he, strong man though he was, was left, for a season, in the "outer darkness" of despair. Though prostrated, he rose again; and though his loss was "to form the melancholy tissue of his life," and that year of bereavement was ever to be spoken of with reverent sadness, as "*the* year," yet he manifested the hallowing influence of sorrow, and with thought and motive purified, seemed only to take higher resolve to benefit the world by well-doing. Indeed, the rapt spirit of CHARLOTTE MESSER seems to have ever hovered near, pointing upward to the sky, and prompting to new purposes of benevolent endeavor; pointing downward, too, to that sacred ground in a fair city by the sea,\* where all of her and all of him "that time can wither" should rest together when his good work on earth was done.

In the lapse of years, when the clouds of trouble and sorrow had somewhat lifted from the horizon of his life, his heart found again congenial mating. Again a happy home was his, and children came to bless his weary lot. Here and there, in his biography, we catch glimpses of sunny happiness in the charmed circle of his home, where love smiled away the frowns of care, and where, as in a pleasant, sheltered garden, grew and flourished the sweet, domestic virtues, filling with their fragrance all the air around.

A business connection had proved unfortunate; the surety's luck was Mr. Mann's. A debt was thrown

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\* The grave of Horace Mann is in Providence, R. I.

upon him, which absorbed all his hard-earned competence, and still was not paid. But it must be. "That demands of honor be met," exclaims the brave and honest debtor, "let all tortures come!" He goes to work to meet his obligations. He is living comfortably; he leaves his boarding-house; he hires a solitary room in Boston, puts his bed and law books in it, and takes care of it with his own hands for three years; while he otherwise restricts his expenses in every possible way, that thus, perchance, he may live out the storm. "For a period of nearly six months," he tells us, "I was unable to buy a dinner on half the days. Suffering from hunger and exhaustion, overworked, I fell ill, and so remained for two months; my best friends not expecting my recovery, and some of them, I sincerely believe, deprecating it as the infliction of further suffering." But the weary, suffering toiler lives — lives to triumph. At length, he is free. He can now say: "I can now call my income my own. I pray God that these trials may now be over and past. Yet not that I would escape from them to fly into any that affect internal character or outward reputation. No: let come what may, upon the body, — let come what may, to crush the intellect: my most earnest prayer is that the moral nature, the affections, the sense of justice and of right, may never be impaired. Let all tortures come, provided they are safe."

From that fiery furnace he had just emerged, when he became Secretary of the Massachusetts Board of Education. We have already seen something of the spirit and purpose with which he entered upon his new duties. He now says: "I no longer write myself attorney, counsellor, or lawyer. My law books are for



sale. My office is 'to let.' The bar is no longer my forum. My jurisdiction is changed. I have abandoned jurisprudence, and betaken myself to the larger sphere of mind and morals. The next generation is my client. Henceforth, so long as I hold this office, I devote myself to the supremest welfare of mankind on earth. The harvest is far distant from the seed-time. Faith is the only sustainer. I have faith in the improbability of the race — in their accelerating improbability."

Many persons, not recognizing "the possible usefulness" of the new office, or "the dignity and elevation which are *inwrought* into beneficent action," said to him: "It is not wise for you to give up your lucrative profession for an office of hard work and poor pay; to barter your political prospects for a post whose returns for effort must be postponed to another generation; to give up your present position in the Senate, which is far preferable to being a post-rider from county to county, looking after the welfare of children, who may never know whence benefits may come, and encountering the jealousy and prejudice and misrepresentation of ignorant parents."

To those cavillers the new Secretary replied: "Is it not better to do good, than to be commended for having done it? If no seed were to be sown save that which would promise the requital of a full harvest before we die, how soon would mankind revert to barbarism! If I can be the means of ascertaining what is the best construction of schoolhouses, what are the best books, what is the best arrangement of studies, what are the best modes of instruction; if I can discern by what means a non-thinking, non-reflecting, non-speaking child can most surely be trained into a noble citizen,

ready to contend for the right and to die for the right ; if I can only obtain and diffuse throughout this State a few good ideas on these and similar subjects, may I not flatter myself that my ministry has not been wholly in vain ? ”

The cavillers went their way ; the Secretary went his, and to his work. There was a dearth of public interest respecting the common school. The public sentiment regarding it was low. The common school was beginning to be looked upon as a kind of pauper establishment, where the children of those only who were not able to patronize schools upon private foundations might pick up a little education. The noble theory, upon which it had been established, that it was to be a fountain of knowledge at which the children of *all* should drink together, was fast losing practical enforcement ; and instead of being the eraser of class distinctions, hostile to republican institutions, and to the welfare of society under them, the common school was negatively becoming the promoter of odious caste. Instruction — save in the cities and larger towns — was poor. Teachers had no means of professional training, and no incitement to self-improvement, for they were meanly paid, and their social rank was nondescript. School committees were both ignorant and remiss. The allowance of school money was scanty, and even that was wasted upon a needless multiplicity of districts whose schools gulped the insufficient morsels, and still were starved. Ugly, unwholesome blotches, called schoolhouses, defaced the landscape of the Commonwealth. School books were as badly adapted and selected, as they were badly used in the hands of incompetent instructors. There was little or no

apparatus, or other means of making *real* the *verbal* knowledge of the books. Legislation, not rising higher than the fountain of popular appreciation, did not well over in progressive educational laws. The statute book, until the recent enactment establishing a Board of Education, was, essentially, in its educational provisions, one hundred and fifty years old. It was in such a condition of things that HORACE MANN became the preacher of education, and the apostle of the common school.

He goes with his message of weighty argument and eloquent appeal, from county to county, and from town to town. Four months of each year he is upon his circuit. He calls the people together in conventions. He visits the schools, observes the modes of instruction, and strives to inspire teachers and pupils with a new and better spirit. He finds, however, a prevalent "dearth or death" of interest in the public mind, especially during his first four or five years of service. He has given us, in his journal, some incidents of his circuit experience, enlivened here and there with gleams of humor. He goes to Salem; "everything dragged and stuck." He makes "a little dent" in Worcester; but he thinks that to make an impression in Berkshire is like attempting "to batter down Gibraltar with one's fist." At Northampton, he "could not shake the dust, but only the mud, off his feet against them." "Barnstable does not seem to have felt any *tingle*." He lectures at New Bedford, and a hundred citizens of the place go off to Westport to hear a political speech, which, forsooth, he finds "exceedingly flattering to his self-esteem, and love of approbation"; but he compensates himself by taking his "pay, not out of those

organs, but out of conscientiousness and benevolence, which are longer lived powers." He attends a "convention" at Pittsfield; at the time appointed, not an individual had come into the place. An hour and a half afterwards, some twenty had strayed in and constituted the convention. In the afternoon he lectures "to about a dozen women and some hundred men," and as soon as he "gets through, the company disperses like a flock of birds that have been shot into." He often finds that "politics have absorbed everything else; and that the idea of effecting political reforms, by reforming the sources whence all evils proceed, seems not to have entered the minds of the people." He sees "every mountebank and hand-organist and monkey-shower and military company running away with his audience"; and he gets accustomed to yield precedence "to every puppet exhibition or hurdy-gurdy mendicant." Now, though there was much in all this popular apathy and lack of appreciation to annoy and discourage; though, from ill health, he sometimes became despondent; though, from lack of self-complacency, he was much pursued with the idea that he could not do enough for the cause that seemed to him so great; and though the earnest intensity of his very sensitive nature impelled him with such momentum that even small obstacles upon which he ran hurt him; yet, in fortunate offset to all this, was his remarkable power of connecting results, however remote, with their causes. He could see the yellow harvest in the seed which he was sowing. It was "a part of his religion to believe in the ultimate success and triumph of the cause."

But the labors of the circuit are not all discouraging.

In many places, at the very first, he is gladly received. Sometimes, further along in his term of service, his progress is really triumphal. It is evident, too, that he is making "dents" all along here and there, into the strong muniments of ignorance, prejudice, and apathy. He thanks God for the "dents," and keeps hammering away. His educational associations keep alive the fire of interest. His teachers' institutes, in which he does service as lecturer and instructor, are diffusing a better spirit, better modes, and higher purposes throughout the corps of instruction in the common school. His visitations are often hailed with delight, and his presence is deemed a very benediction. HORACE MANN, upon his educational circuit, is one of the finest sights of the century.

The circuit, however, was far from comprising all his labors. Other manifold duties, including much of routine and drudgery, from which a delicate sense of official propriety hindered his asking legislative relief in clerical service, kept him, as he once playfully said, "over head and ears, that is, six feet" in work. On and off the circuit, he labored in the cause, "not less than fifteen hours a day" for nearly twelve years. During that time, "he never took a single day of pure relaxation. Months and months together passed without his withdrawing a single evening from working time to call upon a friend." His lectures and addresses averaged one a week. Twelve elaborate reports, wide in their range, and exhaustive in their treatment of vital topics, lofty and original in conception and admirable in style; effective and magnetic in their varied appeals, each a volume, and a standard in educational literature; laboriously collated abstracts and statistics, whose



figures do not lie ; ten volumes of the "Common School Journal," filled with the best thoughts of his fertile brain ; an "insatiable correspondence," demanding of his ready pen, efforts as voluminous as all his other writings, — these were some of the labors of the Secretary. "During travel, at hotels, on railroads, Work was the extra passenger or guest" that attended him. Reports and lectures were prepared "upon the wing," and "proofs" examined, for the printing-press was always thundering behind him. Still, he could look up cheerfully, and say, "Come on, Labor, if you will bring Health in your company."

But, in his sixth year of service, health at last lagged in labor's train, and the brain, becoming morbidly active, "went itself," murdering sleep, so that he was persuaded to take a six-months' trip to Europe. His physicians and friends hoped he would find relaxation ; but he did not. He could not rest ; he was constantly thinking of "his eighty thousand children" at home ; he must make this journey "tell" for their benefit, and for the promotion of *the cause* with which he was identified. Accordingly, he spent almost the whole time in close and laborious investigation of foreign school systems. His trip abroad was like the winged voyage of the bee to the blossoming field ; industry was its pleasure, and work its relaxation. Honey was the result, — the honey of new truth deduced from observation, — honey that should be sweet in the mouth of coming generations. He returned physically unrefreshed, but laden with rich stores of suggestive information. His expenses had far outrun his meagre salary. He was urged to publish a book on his private account, whereby he might be reimbursed. But no ; he was the servant of the State, and

the State was entitled to all his services, thoughts, and efforts. So his book of travels became his famous "Seventh Annual Report," and was *given* as a "public document," to the people whose official servant he was.

✓ In no man's heart ever dwelt a higher or more delicate sense of official honor and integrity than in his. While he would construe most liberally the duties of the office held, to the end that the utmost of service might be rendered, he would most strictly limit the compensation to the legally stipulated *quid pro quo*. He would tolerate no latitude of construction, whereby the official might virtually steal from the public chest. He had a horror of official corruption, and the prostitution of official position to purposes of private gain. He would shun "the very appearance of evil" in this regard. As he used to say, "he was always careful to shake the gold-dust from his garments, when he had occasion to go into the public mint.") When, upon his temporary return to the political field, his partisan enemies undertook to hunt up evidence of his "tampering with the public moneys," — as they phrased it, — with safe boldness could he challenge them to examine "with a microscope," while he expressed the hope that "the examination would make them honester men."

While the public chest found such sensitive chariness of touch at his hands, it moreover received cheerful re-enforcement from the private purse of the pure and zealous official. During his secretaryship, Mr. Mann drew largely upon his private means, to fill out inadequate appropriations from the public treasury, or quite as often, to make up for none. Ought the public mind to be enlightened by the dissemination of educational

documents? He sought no help from the State treasury, but sent the leaves of truth, thick as those of Vallombrosa, all over the Commonwealth, at his own expense. He set his heart upon the Normal School as a most important educational instrumentality. But legislation was slow and niggardly. Private liberality was, however, sought and found; while he himself sold his law library to obtain wherewith to fit up a boarding-house for the first Normal School opened on this side of the Atlantic. The full amount of contributions, such as these, was known to the giver only, who would never reveal the secret. After his retirement from the secretaryship, Massachusetts, by a resolve which passed both branches of her Legislature without dissenting voice or vote, refunded to HORACE MANN, two thousand dollars, not as remuneration, not "to pay him off, but as a token of appreciation of rare disinterestedness in the public service." This movement in his favor was set on foot, without his knowledge or consent, during an absence from the State. When notified of it by the committee having it in charge, he wrote anxiously in reply, "Take care of my honor, whatever may become of my purse." Honor was made safe in the testimony, reaching even the sublime in moral significance, as given by the committee in the report accompanying the resolve for reimbursement, and declaring:—

"He asks for nothing. What he has done, he meant, at the time, for a gift; and the committee do not propose to deprive him of the title of a benefactor. They do not propose to pay him off. . . . He does not desire, and would not be willing to be fully reimbursed; but before all money that the treasury of the Commonwealth contains, he prefers to cherish the happy and noble thought, that he has labored and suffered in her behalf."

It was impossible for a man so strong of purpose, so earnest of conviction, so intense and direct in action, as was the Secretary, to carry on his work without opposition from conservatives, bigots, and other species of the genus Foggy. Mr. Mann was a reformer; a radical, though not a destructive. He could not help making the dry bones shake — and they sometimes awoke cross.

In the light of European observation, he would illustrate and enforce — as he did in his Seventh Annual Report — “the idea of intelligent, gentlemanly teachers; of a mind-expanding education; of children governed by moral means; of more teaching and less flogging.” But in so doing he aroused the ire of certain conservative Boston schoolmasters. A controversy ensued. A not very good-natured pamphlet of one hundred and fifty pages — the result of concerted deliberation, and meant for a thunderbolt — is hurled at him who has ventured thus to trouble the “middle kingdom” of self-complacent pedagogy. A crashing bolt, hot as from Jove’s armory, is the reply. There is a lull; but the heavens still lower. There comes a bolt of rejoinder, only to be met by another of crushing sur-rejoinder, and the storm is over. The air is clearer; some at least of the ancient mustiness of instruction and discipline is gone; and the Secretary, whose sensitive nature has suffered bitter annoyance in the protracted controversy, finds requital in the assurance that healthy reform has been promoted.

While the Bible, through his efforts and influence, went into all the schools, from many of which it had been previously excluded by vote of towns, because it had been used for sectarian purposes, still, because he insisted that “the Book” should be allowed “to speak

for itself" without sectarian gloss or comment, it was asserted, with virulent inconsistency, that he *was opposed to the Bible!* Opposed, forsooth, to the sacred Book, which he had learned to love in the dear home of his childhood, with an "exceeding love,"—a love not to be outgrown, and not to be supplanted by any fetich of human creed! But sectarian bigotry persistently maligned him, — ignorantly or wilfully misrepresenting his religious views, misconstruing his acts, and impugning his motives. Indeed, it was even cried out against him that he was *an enemy to religion*. An enemy to religion was he, who scattered words like these, and, what was better, made his life conform? Listen: "I would enlighten the human mind with all true knowledge and with science; I would repress the growth of all evil propensities and desires; and, in doing this, I would take the gospel of Jesus Christ as my text-book, and the life of Jesus Christ as my example. In this way I would endeavor to train up children in the way they should go."

No man ever communed more closely with conscience than he. He scrutinized most carefully his own motives. He felt delight in doing good; he performed duties of charity "with spontaneous alacrity and pleasure"; but then would he search his heart, and *analyze his delight*, to see that no arrogant feeling of pride and self-complacency mingled with his emotions. How many of those who traduced him, as "an enemy to religion," did likewise? The heartless injustice of sectarianism gave the strong-hearted, but sensitive victim much pain; and often was he constrained to apply to his experience the simile of the "poor rabbit" pursued by "bloodhounds."



But enough has been said on this point: while, in answer to the possible query as to "faults," it need only be remarked, that to search microscopically for spots on so bright and well-rounded a disk of character is as disgusting to any mind of genuine nobility, as it would be profitless in result. Better is it to apply to him his estimate of Kossuth, of whom he said: —

"Many of his admirers think him perfect. His enemies will probably succeed in finding foibles enough in his character to prove him human."

And now the year 1848 has come, — the twelfth of his secretaryship. John Quincy Adams has fallen at his post in Congress. The friends of Mr. Mann have persuaded him to take the place of the "old man eloquent," and he has taken it, ay, and *his mantle with it*. The acceptance of this position necessitates the relinquishment of that so long held. As he retires, he can see a rich harvest of results from the seed sown in faith, and not without tears. And what are some of those results? An enlightened and generous public sentiment; a glowing public interest; town appropriations for school purposes doubled; educational instrumentalities and facilities multiplied; instruction improved and elevated by well-devised means of professional training, and thus teaching made a high and honored profession; the district system bettered, and gradation adjusted; commodious schoolhouses adorning the face of the State; school laws beneficently revised; Massachusetts become a shining example of educational progress, her educational system a model. Verily, the "white-haired" Secretary has done his work well.

Reluctantly did Mr. Mann return to political life.

But his health was seriously impaired by the duties of the secretaryship, which, as long as he held the post, would surely never grow lighter. Besides, he had the idea that he might, by his presence in Congress, the better help in establishing a national system of education, or, at least, an educational bureau, whereby might be recognized by national sanction, and the more effectively enforced, the vital principle, that intelligence is essential to the perpetuity of republican institutions. Though he did not see his favorite idea carried out, yet his congressional career was a brilliant five-years' episode, in which he exhibited in new relations the noble qualities of his nature, and that love of freedom and hatred of slavery which with him were a religion. It was a day of fierce contests on questions connected with slavery. The clouds were gathering blackness, to burst, not long hence, in the lightning and the thunder and the bloody rain of civil war. It was the day of Northern concession to Southern insolence; the day of sacrifice to the grim Moloch of Oppression, when the sacred principles of justice and humanity were ruthlessly offered up; the day of putting up the gaping crevices in the seething Vesuvian crater, with the "dough" of compromises, fugitive-slave laws, and other futile, wicked devices. All this could be nothing else than abomination in the sight of one so strong of conviction, so unswervingly steadfast to duty and principle as was HORACE MANN. It was with sadness, as well as indignation, that he witnessed the conscienceless political truckling to wrong. It was amazing to him, heart-sickening. "What shall be done?" he asks in alarm; and to the weighty question, he finds only the answer, "I know of no other way but through the cause

in which I have so long worked." Of course, under such circumstances, such a man as he would find congressional life anything but agreeable. "One thing alone," he has said, "made it tolerable, — the possibility of doing something to favor the right, or check the wrong." His mind was constantly recurring to the idea that "schools will be found to be the way that God has chosen for the reformation of the world." He "saw every day, more and more, the necessity of the great work of education, *the work of works*." That voice which had borne the evangel of enlightenment and reform over the hills of Massachusetts, rung out, clear and unfaltering, in the halls of Congress, sustaining his uncompromising vote. His words were eloquence — burning eloquence, oftentimes, in protest against hideous wrong; his thoughts were truth — the truth of that God of justice who ruleth the nations of the earth.

No wonder that when Daniel Webster, on the 7th of March, 1850, made, in the Senate of the United States, his speech of concession, HORACE MANN saw therein the "fall of Lucifer," and a "grand life-epic spoiled." Morally constituted as he was, he could not but contemplate the fact with indignant sorrow. Even men of less decided convictions felt sore regret thereat; while sober history can hardly fail to pronounce in gentlest verdict, that effort of the great statesman — whatever its motive — *a mistake*. But we would not reopen, here and now, the historic controversy which thereupon arose between the representative and the senator of Massachusetts. Let the great antagonists stand reconciled in grateful memory, as they do stand to-day, in peace confronted in the fame of bronze, before the Capitol of the State that loves and honors them both.

On the 5th of March, 1858, Mr. Mann wrote buoyantly: "I am a free man again. What a congressional life I have had! But I have fought, and come out with a clear conscience." The next year, he returned to the educational field, having accepted the presidency of Antioch College. He was induced to engage in this arduous enterprise by the hope of having opportunity to carry out his long-cherished ideas of the higher education of woman, the establishment of an unsectarian collegiate institution, and the conduct of it by appeals to the higher moral nature, and without the aid of emulative incitements. But he had to prove the feasibility of his theories, under circumstances the most adverse. He worked for five years, as even *he* had never worked before. The service had in it much of the hardship and privation of the harshest pioneering. It was a tragical test of the true greatness of the man. Though mind and heart were strong and resolute, yet the body was weak, and there came thickening indications that he must fall a martyr to his undertaking. The bankrupt college had, only a few days before the annual Commencement of 1859, thrown off, through the almost superhuman efforts of its president, "the body of death, composed," as he said, "of debts and sectarian bigotry." It was born into a new life. The face of the president was radiant with the joy of an overjoyed heart; but his strength was failing; his brain was over-excited; he was obliged to seek unaccustomed quiet. Commencement came. It was a day of "common rejoicing" and intense excitement. All felt that the *beginning which costs* had been successfully made. Oh, that *his* life may be spared yet awhile, to nourish the new and promising birth! — that was the

prayer of all. The care-worn president looked "too happy, but very tired." What an impressive, gorgeous effort was that Baccalaureate Address of 1859! The sacred fire of the Hebrew prophets, and the triumph of Miriam's song, were in it. Its enthusiasm was as the morning or the evening sun, enkindling even the clouds with glory. Was it the morning, or was it the evening sun? Listen to these words:—

When I think, after the experience of *one* life, what I could and would do in an amended edition of it; what I could and would do more and better than I have done, for the cause of humanity, of temperance, and of peace; for breaking the rod of the oppressor; for the higher education of the world, and especially for the higher education of the best part of it, *woman*,—when I think of these things, I feel the Phœnix spirit glowing within me; I pant, I yearn for another warfare in behalf of right, in hostility to wrong, where, without furlough and without going into winter quarters, I would enlist for another fifty years' campaign, and fight it out for the glory of God and the welfare of man. But, alas! that cannot be; for, while the Phœnix spirit burns within, the body becomes ashes. Not only would the sword fall from my hand, my hand would fall from the sword. I cannot go with you. You must pursue your conquering march alone. What, then, can I do? Can I enshrine my spirit in your hearts, so that when I fall in the ranks (as I hope to fall in the very front ranks of the contest), and when my arm shall no longer strike, and my voice no longer cheer, you may pursue the conflict and win the victory,—the victory of righteousness under the banner of Jesus Christ? . . . Nothing to-day prevents this earth from being a paradise but error and sin. These errors, these sins, you must assail. The disabilities of poverty, the pains of disease, the enervations and folly of fashionable life, the brutishness of appetite, and the demonisms of passion; the crowded vices of cities, thicker than their inhabitants; the retinue of calamities that come through ignorance; the physical and moral havoc of war; the woes of intemperance; the wickedness of oppression, whether of the body or of the soul; the godlessness and Christlessness of bigotry,—



these are the hosts against which a war of extermination is to be waged, and you are to be the warriors. Never shrink, never retreat because of danger: go into the strife with your epaulettes on. . . . And I beseech you to treasure up in your hearts these, my parting words: Be ashamed to die until you have won some victory for humanity.

Ah! this is the gorgeous *sunset* of a noble, heroic, well-spent life! The hero's hand is falling "from the sword." He is in the ranks though, in the strife, "with epaulettes on," full up in front; but he totters, he falls! Bear him tenderly to the rear. His blood is the lava of fever, and his brain is on fire. But vitality and will wrestle with death for weary days, onward to the fated *second* of August. Listen! Inspired words are breathed from the parched lips, — "Man, duty, God"; and to his children comes the heavenly legacy of parting injunction: "When you wish to know what to do, ask yourselves what Christ would have done in the same circumstances." But he sleeps. Sleeps? No: "he hath risen again." God hath taken him!

Oh, my friends, is it not well to linger in the pure, sweet atmosphere of a life like this? Is it not well to warm our hearts and rectify our lives in the light of such an example? Well, indeed, is this; and well were it for us all to hear such incentive to beneficent living in the last battle-cry of HORACE MANN, — coming to us, strong and clear, as from the "shining shore," — that we may "be ashamed to die until," like him, we "have won some victory for humanity."

## DISCUSSION.

Gen. J. Eaton, Washington, D. C. : —

It has been very delightful to hear revived before this old Institute, in which Horace Mann took so great an interest, these memories of that great educator. I have a single word to say, and that is said because I feel so deeply that, while we speak so frequently of Horace Mann in our care, in our urgency for education, I find, as I go about the country, very few that know exactly what Horace Mann stands for, what he was, what he did, and what he is in educational literature and educational history; and I feel thankful that these memories of him have been revived here this morning. I have listened with the intensest interest. I am struck every little while, as we go over the topics of education, with the wonderful power with which he treated everything that he touched. As you see by what has been said, he was always on the alert to know the best thought, the best experience, the world offered in education; but there was this striking characteristic running through his entire life, — the wonderful power, the intuitional power with which he treated the reason of the thing, so much so that to-day if you would make an argument of the greatest force on any one of the leading topics of education, you may find some of the very best arguments in the reports and writings of Horace Mann. As an illustration I may say that, on account of the feeling in the country that music is not properly treated by educators and friends of music, — some being oppressed with the idea that it is going amiss, that the teachers and officers of schools are not regarding it properly, — under such urgency I was induced to make a statement of the present condition of education in music abroad and at home, before a musical convention; and in the driving rush and demand on my time I was compelled to look at the main sources for arguments, and to draw out of the reports in the office the briefest possible statement of facts; but when I went back to the fundamental reason for the thing, *why music should be taught*, its springing out of man's nature for the honor of God and the good of man, then I found that the best argument and most strongly stated was by Horace Mann. Now is there not one

lesson to be taken from this paper? Let us therefore find out definitely what Horace Mann stands for in education. And that can be acquired from the volumes of his life and his writings. How many of those present have seen these volumes? How many of them have aided in urging them upon the public libraries within their reach? How many of them are there in the normal-school libraries, or the libraries of State or city superintendents in the country; or indeed how many have they, of other standard works that should be within the reach of every one who would be a thorough teacher or educator among us?

Mrs. D. C. Heath, of Boston : —

I have been twice a wife and three times a mother, but I shall never be anything else but a common-school teacher; and, as a common-school teacher, in the name of Horace Mann, and in his memory, I wish it might be telegraphed all over the country to-morrow morning that the teachers of the American Institute of Instruction repudiate the claim made at this meeting, in their name, that they should be pensioned. The self-respecting, independent men and women of this profession do not ask to be pauperized.

Another claim made in good-will, and with honest, kindly intent is, that we may accept in our youth a certificate of qualification to teach, and at the end of three years of good behavior have that certificate renewed for life. Let us repudiate that, also. When we cease to grow we begin to die.

When it became my duty to teach English to young learners, I could find no better preparation for my work than to begin at the same time the study of another modern language. To learn how the mind acquires a language, to quicken intelligence, to increase knowledge, and to place the teacher in sympathy with the pupil, are the ample return for such a course. With you, I would condemn the unjust, unnecessary, and nonsensical custom of examining a teacher at sixteen, at twenty, at twenty-five, at forty, and at sixty, over and over again in arithmetic, geography, grammar, and spelling. Let us be done with that, but let us substitute for it, not a life certificate of mediocrity, but a series of examinations of increasing difficulty, marking definite and wisely guided progress. The best thing that a college can do for her graduates is to offer

them the post-graduate course of study leading them ever upward, — onward and upward. And the best thing that the National Bureau of Education can do for American teachers, or for America, is to offer them an elective course of professional study, and provide a board of examiners to grant them certificates at the end of three, six, and nine years. Then to have taught nine years would be an honorable guarantee of knowledge as well as of experience. In the name of Horace Mann, I appeal again. Let us not say that we wish to cease growing, to content ourselves with our attainments.

## XII.

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### GEOMETRY AND ITS METHODS AS A MEANS OF DISCIPLINE.

BY PROF. R. FLETCHER, DARTMOUTH COLLEGE, N. H.

WE are told by that eminent teacher, the late Prof. Davies,\* that, among the ancients, the term "Mathematics in its primary signification was equally applicable to all branches of knowledge"; that "subsequently it was restricted to those branches only which were acquired by severe study or discipline, and its votaries were called disciples." The modern signification of the term as given by Webster is, "That science or class of sciences which treats of the exact relations existing between quantities or magnitudes, and of the methods by which, in accordance with these relations, quantities sought are deducible from quantities known or supposed."

The nature and value of the mathematical sciences have been well set forth by Sir John Herschel, as follows:—†

Their objects are so definite, and our notions of them so distinct, that we can reason about them with an assurance that the words and signs of our reasonings are full and true representatives of the things signified; and, consequently, that when we use language or signs in argument, we neither by their use introduce extraneous notions, nor exclude any part of the case before us from consideration. For example, the words space, square, circle,

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\* Logic of Mathematics, p. 100.

† Discourse on the Study of Natural Philosophy.



a hundred, etc., convey to the mind notions so complete in themselves, and so distinct from everything else, that we are sure when we use them we know and have in view the whole of our meaning. It is widely different with words expressing natural objects and mixed relations. Take, for instance, *iron*. Different persons attach very different ideas to this word. One who has never heard of magnetism has a widely different notion of iron from one in the contrary predicament. The vulgar who regard this metal as incombustible, and the chemist who sees it burn with the utmost fury . . . ; the poet who uses it as an emblem of rigidity; the smith and engineer in whose hands it is plastic, and moulded like wax into every form; the jailer who prizes it as an obstruction, and the electrician who sees in it only a channel of open communication, . . . have all different, and all imperfect notions of the same word. The meaning of such a term is like the rainbow,—everybody sees a different one, and all maintain it to be the same.

It is, in fact, in this double or incomplete sense of words that we must look for the origin of a very large portion of the errors into which we fall. Now the study of the abstract sciences, such as arithmetic, geometry, algebra, etc., . . . being free from these sources of error and mistake, accustoms us to the strict use of language as an instrument of reason, and by familiarizing us, in our progress towards truth, to walk uprightly and straightforward on firm ground, gives us that proper and dignified carriage of mind which could never be acquired by having always to pick our steps among obstructions.

Mansfield, in his "Discourses on Mathematics," says:—

If it be true, then, that mathematics include a perfect system of reasoning, whose premises are self-evident and whose conclusions are irresistible truth, can there be any branch of science or knowledge better adapted to the improvement of the understanding? It is in this capacity, as a strong and natural adjunct and instrument of reason, that this science becomes the fit subject of education with all conditions of society, whatever may be their ultimate pursuits.

The usual division of pure mathematics is into arithmetic, geometry, and analysis. Geometry, which is assigned to the second place, has been defined as the science of relations in space, or as the science which treats of forms in space. Of elementary geometry and its relation to the other branches Mansfield says : —

This science presents the very method by which the human mind develops its faculties. What first meets the observation of a child? Upon what are his earliest investigations employed? Next to color, which exists only in the sight, figure, extension, dimension, are the first objects which he meets, and the first which he examines. He ascertains and acknowledges their existence; then he perceives plurality, and begins to enumerate; finally, he begins to draw conclusions from the parts to the whole, and makes a law from the individual to the species. Thus he has obtained figures, extension, dimension, enumeration, and generalization. This is the teaching of nature; and hence, when this process becomes embodied in a perfect system, as it is in geometry, that system becomes the easiest and most natural means of strengthening the mind in its early progress through the fields of knowledge.

Long after the child has thus begun to generalize and deduce laws, he notices objects and events whose exterior relations afford no conclusion upon the subject of his contemplation. Machinery is in motion, — effects are produced. He is surprised; examines and inquires. He reasons backward from effect to cause. This is *analysis*, the metaphysics of mathematics; and through all its varieties, — in arithmetic, in algebra, and in the differential and integral calculus, — it furnishes a grand armory of weapons for acute philosophical investigation.

The advantages to be derived from mathematical studies are so well set forth by these and many other writers, that it would not be easy to add to them, either as to matter or mode of statement. Having recalled to mind some of them, by the foregoing citations, there is

no need, in this presence, to enlarge further upon what we may assume to be well understood.

It is helpful, at times, to restate to ourselves even well-known principles; to take a resurvey of our position and surroundings from a newly gained standpoint of experience, or to view facts, which themselves are not new, in new relations. Hence, while the subject before us is lacking in novelty, there may be, nevertheless, some profit in a few considerations which may be grouped under the following heads: —

*First.* — The proper place and right use of pure elementary geometry in courses of study.

*Second.* — Descriptive geometry and mechanical drawing in secondary grades of instruction.

*Third.* — Adaptation of the methods of geometry to other studies.

*FIRST.* — *The Proper Place and Right Use of pure Elementary Geometry in Courses of Study.*

In our day there is more recognition than formerly of the law of adaptation of the subject, as well as the method of teaching, to the capacity of the pupil. Primary instruction accords better with the process of nature; object teaching is in vogue. In kindergartens and training schools the teachers are made to stimulate and use the powers of observation in the child. By direct appeal to the senses, a knowledge of many useful facts in natural history and matters of every-day concern is imparted, and this may be a basis for a large fund of information subsequently. Even in the spelling lesson there is an ultimate basis of the object method. For we may raise the question whether, in most cases, correct spelling does not depend upon more

than mere memory, or the sense of sound, but requires a distinct conception or mental picture of the printed or written word, as it appears on the page, with the proper sequence of its letters.

Geometry, being the science of relations in space, derives a special aid from a certain kind of object teaching, and that, in turn, reacts to promote the reception of geometrical truth. Every variety of form seen in the material world may be resolved ultimately into geometric ideals. The first conception comes by aid of the diagram, model, or object; afterwards (and it ought not to be long afterwards), the learner perceives the distinction between the ideal and its tangible or concrete representative; then, by natural steps, comes the full mastery of definition, axiom, and the process of demonstration. We express this process, briefly, in the well-worn phrase, "From the concrete to the abstract."

A most important adjunct of object teaching is the drawing lesson. In schools conducted on the most progressive principles this feature is rightly introduced, at an early stage of progress, to give a useful training to hand and eye. The value of good instruction of this kind is not yet enough appreciated by the majority of teachers. The information and suggestions given a few years ago to this Institute, by Mr. Walter Smith, the testimony, as to results in Europe, contributed by international expositions and by many writers, the labors of earnest leaders among us, all these and other agencies have stimulated effort and produced good results. But only a beginning is made. Not until we have a large body of really competent teachers, and, as a consequence, thoroughly interested pupils, can we realize the best results and widespread benefit.

But the art of drawing and the science of geometry are mutually dependent. The connection has been well stated by Prof. E. L. Richards,\* as follows :—

In consequence of the necessity of representing the conceptions of geometry by diagrams, in which lines in order to be perceived are given breadth, the visual perceptions are trained by the study, and exactness of sight is cultivated as well as exactness of thought. The effort to picture in the mind these lines in their relative positions, and again the effort to reproduce them in a diagram, give exercise to the *imagination of form*. In this process of construction of figures by geometric laws, we have two powers brought into play, first, the power of *abstraction*, and, second, the power of *reproduction*. . . . The study teaches, therefore, the two important elements of abstract thought, *conceiving* and *judging*.

The fundamental nature of the science, therefore, is beyond question, and it is evident that properly it should have place near the beginning of the course of instruction. Although it is named second in the division of mathematical science, and usually so regarded, the law of adaptation to mental growth gives it rightful precedence. Not that it should absolutely displace elementary instruction in numbers, but at least the two should go hand in hand. As to arithmetic, if we except the first principles and elementary operations under the four fundamental rules, we find that the beginner usually does not come readily to a real understanding of the subject. Perhaps, at this stage, it is best to make the exercises chiefly mental, strengthening the memory by drill in the tables, and making but little use, at first, of the symbols or figures. The science is essentially analytical; its processes of reasoning are more complex than those of geometry, and more like those of algebra,

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\* In the "New Englander" for July, 1883.



which is the type of branches included under analysis. In arithmetic, as well as in algebra, the symbols which must be used stand between the data and the result sought, and the mind is diverted from the full relation between them. Hence the tendency to become too much concerned with rules, and to lose sight of the reasoning processes.

Geometry, on the contrary, is essentially synthetical in its method. From the basis of a few easily intelligible definitions and axioms, we proceed by direct reasoning to principles which are immutable truths. The mind has always in view the relations involved, and clearly sees the connection between premises and conclusion. The processes are simple and adapted to an early stage of mental growth.

It is true that elementary instruction in drawing introduces the usual simple geometrical figures and definitions as the basis of the more advanced exercises; but this is not enough. Even as there is a tendency on the part of teachers to undervalue the drawing lesson, and to use it only occasionally, or as wholly secondary in importance, so there is danger that the geometry — the essential science — will be kept quite in the background. In the study of anatomy, we do not begin with the skin and muscles, but with the skeleton; then further application reveals how all other parts are assembled upon, and their functions regulated by dependence on the essential framework. So, even in the early stages of this training, the pupil must be made to see constantly the geometrical principle which is ever present; and by frequent recurrence to definition and axiom, while attending to the manual exercise, become imbued with the spirit of the science. Progress in the

art will be much greater as the underlying science is better understood.

On this point we have the testimony of an eminent teacher of drawing, in Europe.\* After referring to past failures in the teaching of drawing, he says:—

This evil is not the consequence of a want of talent in those who teach; on the contrary, many of our teachers are very competent; and by far the greater number possess undoubted talent. No; the fault lies in another direction, in that too frequent and widespread mistake that the study of the human figure suffices and ought to precede everything else. . . . According to my idea, all elementary drawing should take, as its foundation, geometry, and make the elements of this science subservient to the analysis of artistic forms, in such a manner that they are not an inanimate instrument only, but, on the contrary, a means by which the pupil can himself control and appreciate his work. . . . I have arranged it in such a manner that the pupil is at once enabled to appreciate the peculiarities of the most complicated forms, using simpler forms with which he has already been made familiar.

As to the continued relation of this study to arithmetic, it seems reasonable that there should be judicious alternation, so that in effect the two branches may be like companions, giving mutual aid. After the fundamental rules and fractions have been mastered, the essential part of the first book of geometry may be brought forward. By the time that decimal fractions and percentage are well understood, an available knowledge might be had which would include the leading principles of the so-called third book, or propositions concerning the circle and measurement of angles. The subject of ratios and proportions is common to both

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\* M. Hendricks. See Stetson's "Technical Education," Boston, 1874.

branches, but more readily comprehended in the light of geometry. Certainly the study of the applications of percentage to interest, commission, partial payments, etc., may well give place to elementary geometry. Time and effort are wasted by crowding upon boys and girls topics which relate purely to business life, of which they can get, at best, but very imperfect and impractical ideas. Such matters should be deferred until a late period, and brought forward as simple applications of familiar principles. The study of the theory and applications of square root and cube root properly concludes the ordinary course in arithmetic; for this the learner will be much better prepared if he can bring to his aid a good knowledge of geometry, to include the essential principles relating to proportions of plane figures and measurement of areas. In brief, then, the proposition is to include, *in the scheme for the grammar school*, the usual course of elementary plane geometry, instead of relegating the subject to the high school. This may require extension of the time to be devoted to the courses in the grammar school; so much the better. The present great need of relief from over-pressure would be met by cutting off superfluous studies and giving an additional year, not simply for geometry, but to allow more deliberate and thorough study of *all* the *necessary* branches.

The proper course of drawing lessons, already referred to, consists largely in freehand work. The diagrams for the geometrical demonstrations may also be required to be done in freehand on the board, as a means of further advantage to the pupil. But the problems call for mechanical construction, and this may be done first at the black-board by such simple

means as string and straight-edge. Near the end of the course, however, all such work should be done at the desk, so that the pupil may acquire facility and accuracy in making constructions on paper, by aid of pencil, rule, measuring scale, and dividers, with or without the triangle.

It will be said that such an innovation is entirely impracticable; that children at that period of life cannot be made to reason very much; that memory must be their chief reliance, etc. On the contrary, something of this plan has already been realized in Europe. In schools for apprentices, in the elementary free schools of France and Germany, and in special courses of technical instruction, both freehand and mechanical drawing (and the geometrical basis) have been successfully taught to average pupils, such as attend our own common schools.

But how will the competent teacher make right use of geometry for discipline? First, the utterly vicious and futile method of making the study a tax upon the memory, chiefly, will be carefully avoided. This practice has been too common, and cannot be too severely condemned. Then special attention will be paid to definition, and to the formation of clear conceptions at the start. Next, must be developed a habit of using the most exact and concise language to express the idea. From this follows the lesson of the value of deliberation in forming conclusions, and the folly of all extravagant language or hasty statement. Withal, there will be, from time to time, tests of the progress of the pupils, by problems which give proper exercise to the power already acquired, so as to spur them to further effort and inspire confidence in themselves.

Such an assignment and use of geometry would confer the acknowledged advantages of a valuable discipline upon the greatest number. In the grammar school the benefit would extend to many who do not have higher schooling, instead of being limited to the smaller number whom circumstances permit to enjoy the privileges of the high school.

SECOND. — *Descriptive Geometry and Mechanical Drawing in Secondary Grades of Instruction.*

While many in this presence are doubtless well acquainted with descriptive geometry, it is probable that others have not included this branch in their studies. A few words by way of introduction, therefore, may not be out of place.

The course of study and practice, just outlined, has been confined chiefly to objects of thought considered as having two dimensions. Only plane geometry was included; but the course of drawing may have introduced the representation of simple objects of three dimensions, by means of outline or contour; in technical language, by their elevation or vertical projection. We are to understand by the term *projection of an object*, the intersection of visual lines drawn from the eye to the principal points of the object, by the plane of projection or plane of the paper. The idea of projection has been imperfectly apprehended, perhaps, hitherto, but is now to be made prominent. Hence, the next step in advance brings us naturally to the comparatively new science which we are to consider.

Descriptive geometry was invented or founded by Monge, in France, towards the close of the last century. "The essence of the science is the reduction of geometry



of three dimensions to geometry in a plane.”\* Davies defines it as that branch of mathematics which considers the positions of geometrical magnitudes as they may exist in space, and determines these positions by referring them to planes called planes of projection. Prof. Church is a little more explicit in the statement that the object of the science is “to represent by drawings: *First*, all geometrical magnitudes; *Second*, the solution of problems relating to these magnitudes in space.” The drawing is not the solution nor even a means of producing it, but only the graphical expression of the solution. The real solution is entirely a mental process. As a method of graphical expression, descriptive geometry is a language for the use of architects, civil, mechanical, and other engineers, builders, etc. A designer has in mind some sort of construction, more or less well defined; details are to be elaborated from this initial idea. The only adequate means of giving proper expression of the thought, and intelligently perfecting it, are the principles and conventions of this science. The competent builder, machinist, or other artisan, guided by the graphical expression, produces the embodiment or material expression, in wood, stone, or metal. In some cases the drawing is the only means of communication needed; in many others very brief additional specifications on some points, which can be only verbally expressed. There is good authority for the statement that the great engineer Ericsson seldom visits the works where his designs become constructions; that, in one case, it was necessary to take a small engine to his office, so that he might be induced to see the operation of it.

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\* Article “Geometry,” Appleton’s “New American Cyclopædia.”

He says: "What is the need of my going to the shops? The drawings are all right; if you follow them correctly, the thing must work." Swinton, in his book, "The Twelve Decisive Battles of the War," says concerning the design of the original "Monitor":—

The urgency of the times spurred the executive ability of Ericsson into full play. With his own hands, he made the working drawings of the "Monitor," though it was, in popular phrase, wholly "cut from new cloth." He so arranged the details to achieve the greatest despatch in their construction, giving out first the parts which required the longest time in building; and he employed various constructors for this purpose. The hull was built at Greenpoint, the turret engines and their gearings at Schenectady, the turret itself at one New York shop, the motive machinery and propeller at another, and all from the inventor's own drawings. All the parts, being collected and put together, fitted with the nicety of a dissecting map, and they formed the ironclad "Monitor."

Descriptive geometry includes the theory of shades and shadows, the theory and applications of perspective, methods of representing the surface of the earth by maps and charts, or so-called spherical projections, and other branches of interest and value to draughtsmen. Necessarily it is fundamental in the education of an artist, since all proper knowledge of shades and shadows and perspective must rest upon the theory, or geometrical basis. Hence it is a leading subject of study in technical schools and, properly, a great deal of time is devoted to it.

The foregoing preliminary, although brief and imperfect, must suffice for the present occasion. We may proceed to consider a suggestion, to wit, that a branch of knowledge having so much general value and importance should not be restricted, as the usual practice

now is, to schools of technical training ; that it belongs properly in the high school, where it can be brought within the reach of a larger number who will fill more various callings.

Of course no one will suppose that any amount of mere study of this science in the school will confer also the ability to use it with the facility and skill of a practitioner, of which we have given a single instance. The science, as we have seen, gives us a method of graphical expression which is essentially a language, and, therefore, like all language, merely a means to an end. The power to conceive, to design, to create, comes only with that knowledge of many other branches, and the skill to apply the knowledge, that follows from a long course of practical application and experience. But the value of the knowledge, as a means of understanding the ideas of others graphically expressed, is conspicuous. Obviously it is indispensable in the foundry, machine-shop, builder's establishment, and to all who *direct* construction ; and it is also a valuable aid to the workman, to artisans of every grade, in short to all who have to *interpret* designs for any kind of work.

Without attempting to go into details, we may propose that, upon the basis of the knowledge of elementary plane geometry which ought to be acquired in the grammar school, we should build a good superstructure of the more advanced geometry, including plane trigonometry, and superpose on this a practical course in descriptive geometry, all of which, above plane geometry, is to be included in the programme for the high school.

In the more advanced geometry the study of the definitions and propositions relating to planes and

polyhedral angles, to polyhedrons, to the three round bodies, so called, would be aided greatly by the spirit and method of descriptive geometry. The latter subject would generally be preceded by the geometry and mensuration, nevertheless it would have a retroactive effect of the nature of a review and illumination of the others.

Mr. Stetson, in an essay on "Technical Education," published a few years ago, gives conclusions based upon actual experience in Europe, in a summary from which we quote : —

As it is impossible that every one should be thoroughly instructed in all the departments of drawing, it is well, in determining what the pupils should attempt, to divide drawing into three general courses : a preparatory course, an industrial course, and an artistic course. The preparatory course, embracing the elements of both industrial and artistic drawing, should be pursued by all pupils alike. When this course — which should be quite liberal, extending at least through the grammar school — has been finished, those pupils of the high school who are to engage in industrial and artistic pursuits should give special, though not exclusive, attention to *projection* and *working* drawings. For a similar reason, those pupils of the high school who desire to obtain a more purely artistic culture will give special attention to shading and perspective, to drawing the human figure, and from nature. As it is not the proper business of the public schools to make specialists, the instruction in the industrial course should be, in the main, confined to those things which the different industries have in common. . . . In its general character the instruction should be rational, not dogmatic; that is, the pupils should be taught the reason for what they do, so that every drawing, every line they make, will be an expression of intelligence. . . . It should be the aim to produce workmen, designers, artists, who can do something more than imitate; who, working in obedience to fundamental principles, can meet the ever-changing requirements of actual life, can give the world original creations. Those

pupils whose instruction in drawing simply enables them to copy, have been poorly instructed indeed; and the instruction will tell adversely upon their future careers.

A few words as to method.

Now, if these conclusions are justified by experience abroad, we need no further argument to show the necessity of instruction in that science by which such results may be had in the shortest time and the best manner. Perhaps, in what has been already done, too little time has been given to the theory and too much to the mere work of draughting. We should require that pupils of all grades of the high school have full possession of the key which unlocks all the mysteries of this department of knowledge.

At whatever period in the course of study descriptive geometry is taught, the degree of benefit derived will depend largely upon the method adopted. We have shown that the solution of every problem presented consists of two parts, — the analysis and construction. Now there is a tendency to make the construction the chief matter, and the analysis quite secondary or pass it over with the least possible attention. Such a method is quite detrimental to real progress. The very reverse process is required. The analysis is all-important. The mental conception of the steps in the solution is the first thing to seek; then this must be expressed verbally in the most concise manner, but with clearness. Just here a natural tendency of the pupil to multiply words has to be watched and corrected. Then the necessary diagram constructed on the black-board is referred to, serving as a means of conveying some of the ideas more readily than spoken words, thus aiding to secure that com-



pactness of statement so much desired. The mental discipline derived in this way is not excelled, we venture to say, by that from any other study. A gentleman, who is now a lawyer and a judge, said recently, that he thought, on the whole, the study from which he derived the most benefit while in college was that of descriptive geometry.

During this first period, when the science should stand foremost, the drawing should be subsidiary, being confined chiefly to the black-board, and considered as a means auxiliary to the complete and perfect demonstration. This period is the one in which the hard work must be done, in the main. After this comes what may be termed the period of applications. The essential definitions and concepts and fundamental problems being fully mastered, progress thereafter is rapid and easy. The drawing exercises or constructions, involving shades and shadows, perspective and isometric projections, would be only applications of principles already familiar.

If it be said that the method of common geometry is very similar to the one just described, and that the benefits should be as great, we may say that this is partly true. But the range of descriptive geometry is far wider; it gives greater scope, and at the same time better discipline to the imagination; also, the utility and immediate outcome are so much more apparent that the student generally pursues the study with more interest and diligence.

The defective mode of teaching makes too much of applications at first. The subject is presented rather as a series of drawing lessons. Underlying principles are not kept persistently in view. There is too much

repetition of the same sort of drawing lessons, or exercises involving only principles already known; hence progress is slow. The broad, governing principles not being fully appreciated, advance into new topics or aspects is too much like a new beginning. There is a waste of time, and never a full grasp of the science, if these mistakes remain uncorrected.

The best aid to instruction is a good text-book, *i. e.*, one which gives a concise and orderly presentation of leading principles, with no more examples than are necessary for illustration. The pupil cannot learn to the best advantage wholly through verbal instruction by the teacher. Thorough knowledge at first must come chiefly by hard study of the book, and this is to be tested by frequent demonstrations required from the pupil at the black-board.

In this connection we may properly consider the expediency of the use of models. We know that object teaching of a certain kind, and at the right time, is useful. But in other cases it may be pernicious. In the communal schools of Paris, in the free public schools of Germany, in special schools for artisans, and other schools throughout Europe, models and objects are freely used to bring before the mind of the pupil the thing to be represented. For the drawing exercise merely, before direct attempt is made to bring geometrical principles into prominence, a great deal of work is done to the best advantage in this way. Many ideas of geometrical forms and principles may be received and deeply impressed upon the mind during this period. But there is danger that this method will be continued too long. To give young pupils, knowing only the bare elements of geometry or even something more, exercises

involving shades, shadows, and perspective, before the theory is understood, is, as we think many will agree, a great mistake, no matter how many or how perfectly adapted may be the models for illustration. To make more intelligible the first lessons in descriptive geometry, simple models or pasteboard forms may be used, until the principle of projecting the object on two or three planes, and showing the two or three projections on the plane of the paper, is fully perceived. After this the model is a bar to progress; the pupil will be apt so to depend upon the material form that, when a new principle or problem is presented without such illustration, he will be helpless. In the more advanced part of descriptive geometry, a few models representing warped surfaces and some problems of intersections, as well as one or two illustrating the theory of perspective, are useful, and, in case of some students, nearly indispensable. But, generally, the student looks at the model, and, without any severe mental effort on his part, everything seems plain. But if he were required to make the model, without opportunity to copy merely, the extent of his knowledge and ignorance is revealed to him; he finds he must go deeper than he supposed. When he has learned all of the how and wherefore, the actual making remains only as a matter of handicraft, bringing no gain of knowledge. Hence it is better to master the principle by the inevitable study at first. Ever afterwards the embodiment, whether in model or drawing or structure, is appreciated at once and completely in the light of the principle. If we want a boy to have a good understanding of the construction and operation of a locomotive engine, we do not expect him to gain much by

taking him immediately to see one in service. We know that he must first study mechanism, the physical facts concerning steam and its applications, the construction of the special machinery by aid of drawings and, perhaps, by visits to the shops, the history of the development of the steam engine and of railways, etc. After that he is prepared to inspect a locomotive intelligently, and gain some knowledge that did not come by other means.

To conclude under this head, it seems perfectly evident that the great benefits flowing from this science rightly taught, the mental discipline of the study and the manual skill acquired in the drawing, viz., the elegant constructions in perspective and the more practical structural drawing relating to carpentry, machinery, architecture, etc., — such discipline and acquirements would be far more useful to youth leaving the high school than the smattering of modern languages and other superficial attainments which too often make the meagre outcome of their studies.

THIRD. — *Adaptation of the Method of Geometry to other Studies.*

Since the method of geometry is purely logical, and especially adapted to develop the reasoning powers, at once some may inquire, How can there be application of the science or its method in the many branches which do not involve mathematics or logic? What aid can be derived in the teaching of geography, history, and other branches which are concerned, for the most part, with facts and statistics having no logical connection or sequence, and which demand the exercise of memory chiefly?

We hardly need to recall the fact that a fundamental characteristic and element of the geometrical method is definition. Certain simple but distinct conceptions are the first requisites. We are taught that every proper definition must have four qualities; viz., it must be adequate; it must be plainer than what it defines; it must be expressed in a convenient number of appropriate words; finally, if the definition implies the existence of the thing defined, the certainty of that existence must be intuitive. Well, then, how can such requirements be met in a purely descriptive science, as, for example, geography?

First, we begin by simple description and definition of the principle features of the earth's surface. The synthetic method must be followed in proceeding from that which is familiar and easily apprehended to the unknown and complex. Logical development is demanded, although too often neglected in teaching; for instance, the meaning and use of maps, beginning with simple diagrams to represent local and familiar topography, then setting forth in order maps of town, county, state, country, and continent. After all, the description, whether long or short, is merely extended definition, with this distinction, that definition embodies simple conceptions, while description presents complex objects of thought and various relations. Generally, description may be indefinitely extended, and can never be complete. Suppose the subject to be Cuba. The description should include every means of giving the right idea, as well-chosen language and pictures, ordinary and raised maps, models in plaster or in sand on the moulding board, books of travel, etc. The situation, adjoining lands or waters; some knowledge of the



people, their history, and occupations ; of the vegetation, animal life, productions, etc., — all are necessary to the formation of a correct idea of Cuba. But there must be limitation, since a really complete knowledge would not be had, even by actual residence, travel, personal observation, and study for a lifetime. So regard for the correct method confines attention only to really essential features ; *i. e.*, description is reduced as nearly as possible to definition. If the text-book or teacher presents and requires too much, as is so generally done, but little is assimilated, and the residuum of knowledge proves to be very small, notwithstanding a great tax upon the mind. In the case supposed, for instance, the result concerning Cuba should be a great deal more than a mental image of an oblong green spot on the map, with some ill-defined notions about sugar, bananas, cigars, Havana, etc. Perhaps we do not maintain sufficiently well a realizing sense of the care which is necessary on the part of the teacher to convey correct ideas and prevent all misconceptions. A child born and reared on a Western prairie learns something about mountains, oceans, steamships, and a thousand things it has never seen and, perhaps, never will see ; but how is it to obtain really accurate conceptions, even with every aid to the imagination ? The teacher would make startling discoveries in many cases, if the actual result made upon the mind and imagination of the child could be seen, — that inner impression which is not revealed by the routine answer to a question.

It is evident, then, that definition and the logical method not only have place in the study of geography and many other branches, but are indispensable to the securing of the best results.

Again, we have seen that the science of geometry, from conceptions relating to lines, planes, figures, surfaces, etc., suggests distinctions, grouping, and comparison of results deduced, and leads directly to classification, and that the mind is thus prepared for analytical processes and generalization. Now we know that all the natural sciences, so called, are developed by, and themselves develop methods of, classifying and generalizing, while depending upon another faculty not required in geometry, viz., observation. But the discipline of the powers of observation which the student of natural science acquires in collecting data, the use of judgment in weighing evidence and forming conclusions, all are properly based upon and demand the method and discipline of geometry. For a subject like history, which is not so much descriptive as narrative in character, the method of classification becomes the law of association. Whether we deal with mere facts and dates, or with the social, political, and moral development of nations in a more philosophical study, we divide and subdivide into periods, and put forth some great event or leading personage to give character to an age, and serve as a central point about which are grouped all other events and persons of the time. The same principle demands proper association of history with geography, for the event is more readily remembered and appreciated in its relation to the place of occurrence, and the place or country has another important element of its description in the knowledge of what has transpired therein.

To-day, the interest in education is all but universal. The subject is examined, re-examined, and discussed from every point of view, with varying degrees of

knowledge; but, in spite of widely differing opinions, the cause is sustained with substantial unanimity. Our national Bureau of Education collects information of the most varied character concerning many departments of instruction and institutions of every grade. The reports of the commissioner, giving us wide survey of work and progress in this and other lands; the issuing of such special reports as that of Mr. Philbrick on city school systems of the United States; the holding of conventions like the present one; and the labors of many by voice and pen,—all such means tend to make common property the experience and success of any section, and to promote higher standards and uniformity everywhere. From the nature of the case, some of these agencies make us better acquainted with the quantity than the quality of the work done. However, there is unwelcome evidence that the quality of very much of the so-called education received to-day is far from satisfactory. Notwithstanding magnificent provision of common and high schools at public expense, supplemented by institutions of higher learning, maintained by public spirit or private generosity, in spite of abundant facilities, there is growing complaint that the majority of youth are not so well equipped for the work of life as we have reason to expect. Let us descend a moment from generalities to cite a few facts.

A professor, in a recent number of a leading periodical, shows how discreditable are the results from examinations in English for admission to Harvard. Among more than four thousand papers, there was considerable gross deficiency, occasional excellence, rarely great merit, and the larger bulk of very discouraging mediocrity;

and this from boys who have been taught (we cannot say fitted) in what are claimed to be the best schools in America. Men in business complain that after years of schooling, coming fresh from study, even from college, there are so many youths who prove incapable and inefficient, who cannot make simple computations or write a plain letter that will meet the requirements of ordinary transactions. And none know better than teachers themselves how far short of their expectations are many of the actual results. What exasperating experiences do we have with letters from pupils in high schools, colleges, and even from graduates of colleges, — letters which lack many or all of the very essentials, — showing bad grammar, incorrect spelling and punctuation, wretched penmanship, and neglect of the proper form. And this is not from one section only, but from East and West alike. Of applicants for admission to the United States Military Academy, thirty per cent or more are rejected annually. While some failures are due to physical defects, the larger part are on examinations including only what is taught in any common school, — reading, writing, spelling; geography, simple arithmetic, and United States history, — and this, notwithstanding that nominations are made a year in advance, and full information is given as to the character of the examination. The rejection even of college men is not unknown. At an examination for intercollegiate honors in mathematics, not many years ago, one of the disappointed competitors came to the examiner to learn the cause of failure, and ask advice, stating that he had taken the usual full course, and had read on elliptic functions and other higher mathematics with a distinguished professor. He was informed that his defi-

ciency was fundamental, that he ought to go back and study arithmetic and algebra.

We need not give more of such facts. Any one present knows of similar ones. Are they simply like imperfect fruitage, of which we must expect a certain proportion, and try to make the best of it? No, it is to be feared that they are natural results from widespread and deep-seated defects which need the highest wisdom and skill for proper treatment. It is entirely irrelevant to enter now upon any formal examination of so large a subject. However, a few suggestions, which properly conclude the consideration of the topic before us, are quite pertinent to this question as to the quality of some of the outcome of educational work in this country.

We naturally inquire: Where are the great results, the improving discipline, which have been portrayed as flowing from the study of mathematical science? Although that study is pursued from the primary school upwards through the university, why is it that the benefits of such a training do not appear more generally and in greater degree?

One reason lies in the fact that *discipline* is neglected. The method of geometry tends always to discipline. For the best results *discipline* must be a controlling purpose, throughout the entire period of tutelage. In regard to the majority of the institutions for public instruction, in the cities especially, the great impediment to the proper development of mental discipline is readily seen. It is, in a word, over-pressure. Now we hear a great deal about hunger and thirst after knowledge; about the toilsome climb up the hill of science. But in these days we may more truthfully say that the youth are *driven* to the fields of knowledge as sheep to



pasture, and, when there, they do not graze by natural methods, but the fodder is cut and dried and crammed down their throats, neglecting mastication, while drink is administered by an educational force pump. Although "there is no royal road to learning," it does look as though there is an idea of building a railway up the hill of science. The evil begins at the lowest grades. In the upper grade of primary schools in New York, children are examined and marked under seventeen different heads for promotion to the grammar schools. Where numbers are so great and classes so large, there must be a great deal of machinery in the system. At best, minds must be dealt with more or less in the aggregate. But when both teachers and pupils are over-loaded by the dictation of boards and committees, whose members have little or no experimental knowledge of teaching, what can we expect? Certainly there can be no intelligent supervision of the mental growth of individual pupils. Is it not true that a large majority of children would make good pupils, if they had a fair chance? We understand by the term "pupil" one who has the purpose and reasonable capacity to learn. There are fewer dunces than many people suppose. All trees do not put forth foliage early in the season. Many cases of apparent dulness are but plants of slower growth. As many courses of study are now arranged, even those who are gifted with brighter minds and greater strength are injuriously stimulated in order to perform decently the many tasks. The slower and weaker ones are too often neglected and discouraged. We are witnesses to this untimely arousing of a mistaken and misdirected ambition, to the oppression of physical and mental powers, and the common cases of utter

break-down and lifelong injury. What means the recent outcry in Germany, which led to investigation by the government, and modification of programmes? Surely there must be good cause for the more recent protest in England, in spite of the plausible defence of school boards, when very high authority confirms the fact of widespread injury from over-study. We take just pride in the magnificent provision made by the earnest and enthusiastic citizens of our large communities all over the land. There is excellent discipline of government, good system, but too much reliance upon machinery; too much of a tendency to treat all minds alike; as though, like any raw material, all can be put in at one end of the mill and appear at the other end a finished and uniform product. In such a struggle, if there is a law of "the survival of the fittest," unless we have reformation soon we shall have to say, few are fit to survive.

But the evil does not stop with the public grammar school and high school. Pupils who have had studies crowded upon them before they can realize the aim and value of the work, who have no time to assimilate, are not really prepared for entrance into higher institutions. Their acquirements are too much like a foundation built in quicksand, no solid support for the intended superstructure. Hard-working boys from the country, who with few opportunities have acquired their knowledge step by step, with a full sense of its value, in college soon outstrip more favored ones who have had every facility thrust upon them. And even within the precincts of the college we need a more constant recognition of the primary value of discipline. Neglecting all consideration of the lamentable perversion of grand

opportunities, now so common in leading colleges, due to the demoralizing and absorbing attention given to athletic contests and other distractions, apart from all this, we find little of the really studious spirit, very much superficial work, and impatience of any discipline of hard study. We are all naturally lazy. Students, whether men or women, are no exception. They are too willing to "read up" a subject in a general way, and imagine that skimming is studying. Of course lectures are popular, especially on literature or art or any other topic that does not call for very much thinking. Dishonorable tricks are resorted to for avoiding honest work. What effort there is becomes scattered over too many fields. There seems to be an idea abroad that because division of labor is now a necessity, and specialization a feature of the age, therefore we must apply the principle in the colleges and lower grades. It is a great mistake. In the primary school, grammar school, high school, and to a great extent in the college also, we must confine ourselves to elements, and see that we do good work on foundations.

Yes, nearly all of our educational institutions need more of the spirit of discipline; it would give partial check, at least to the disheartening waste, not only of time and money, but of the faithful labors of overtaxed teachers. Mr. Charles Dudley Warner says, in effect, that it is well, once in a while, to make a boy do something that he does n't want to do. Let us try it once a day at least.

Say what you please about the value of oral instruction. Some even disparage the general use of any textbook, and would make the teacher talk incessantly. Doubtless the oral method has its uses, especially for

small children and on special occasions; in higher courses *lectures* are sometimes necessary. But the most thorough instruction and greatest economy of time and labor, both for teacher and pupil, come by the right use of a good text-book. If a teacher makes independent study and research, and wishes to give the result to the class, by all means have it printed. Give them a chance to receive and digest it. Do not inflict the drudgery of having them write it from dictation, or the farce of having them take hurried notes, unless they are stenographers. Why, we know how it is ourselves, in the present instance. A number of ladies and gentlemen have spent weeks in preparing papers to read to this Institute. Do we pretend to take it all in at every sitting? How many of us will carry away even a tenth of what we have heard? A few large chunks of wisdom will remain, but a great deal will be spilled over, because we cannot contain it.

But we must beware of *abuse* of the text-book. It must not be a prop to give the teacher relief from independent thought. It must be simply a guide to direct the thought both of teacher and pupil. The teacher must know how to make *right* use of the book, and how to make the pupil use it to the best advantage.

Perhaps many of the teachers here have more or less influence in choosing the means and methods of their instruction. If so, great are your opportunities. May you know how to improve them.

Teachers, are we sometimes dismayed at the greatness of the task before us? Does the work appear vast and perplexing? Do we find lack of sympathy and co-operation where we have most reason to look for encouragement? Let us not be weary in well-doing. Let

us maintain courage and patience. As in the mathematical method, so in this great problem, we must ever keep in view and work by simple principles which will lead us out of many perplexities and resolve many doubts. Some of the more essential of these guiding principles we may briefly state in closing.

1. Be more concerned about the quality than the quantity of the result. "One, but a lion."

2. Always keep the instruction down to the capacity of the taught, and thus foster a consciousness of power and confidence of mastery.

3. Talking by the teacher should be restricted to the smallest limits practicable. The pupil should be made to express the thought in mind as well as possible. We must not try to think for the pupils, but draw out the expression of their thought. An old professor of mathematics used to say in effect: Do not tell me that you understand the idea but cannot *express* yourself; if you do understand it you can express the thought so as to convince me.

4. It is our work to put into the mind the nuclei of knowledge, but not to attempt much more. Around these centres, knowledge will crystallize by a process which we may partly direct but cannot wholly control. Or, to change the figure, we can only make the pupils acquainted with the avenues of approach to the treasury of knowledge, unlock for them a few of the doors, and leave the key in their hands. The real work of appropriation must be theirs. How can we help them very much when we have got possession of so little ourselves? Many of them will do far better than we have done.

For, finally, education, so far as it is a business



between teacher and pupil, is rather a means than an end. The school, of whatever grade, cannot educate a man or woman in the highest sense. Education, as education, is the drawing out or leading forth of the mind and all the powers into the proper sphere of their activity. Ultimately the man educates himself, or God works with man or woman in developing the true education. Do we say it is the work of a lifetime? It is more. It is the work of eternity.

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### DISCUSSION.

Gen. Eaton, of Washington :—

The paper we have just heard was aimed admirably against various mistakes of the present time. Neglect of discipline is one of the great mistakes of our day that attend the teacher's life. Discipline has no clap-trap in it; it *is* no clap-trap; it is in the way of many easy-going ideas, and yet when it is wanting the public school loses one of its great powers. In treating this subject we have need to be careful of accepting certain ideas referred to as floating about in regard to education. The danger of cramming was mentioned, a danger that should be in the minds of the teachers, and which a proper appreciation of discipline should affect. The errors in connection with cramming will be corrected by a proper view of discipline, hence we should be careful to see where this cramming comes in.

The teacher knows perfectly well<sup>1</sup> that one of the most serious difficulties in the way of education is the indefiniteness of ideas of the children. Now we may say the same thing of the whole subject of education: the one primary and serious difficulty is the indefiniteness of ideas that prevail about education. The public schools of this country, and in Germany, England, and the world over where they have acquired any efficiency, and especially the city schools, are charged by the wholesale with cramming; not cramming in general, or after the nature of the university cram,

but cramming to a degree of fatality for the children. It is my fortune to see a good deal of educational systems and to observe a great many individual cases. I have taken them up in a large number of cities in this country, and tested them in connection with the public schools and the private schools, and the normal schools, and the colleges, and the professional schools. Now I have one single remark to make: in all my observation the proportion of fatal cases of cramming to the number of pupils instructed is less in the public schools than in the private schools, than in the normal schools, than in the colleges, than in the professional schools. That is my conclusion; it may be a mistake. If it is correct, then the difficulty is not in the public school system. And what is the public school system but a method of order by which the whole community attempt to act for themselves in securing in the aggregate a great end? What is this order? Now, then, if every school officer, if every teacher, is exercising his whole knowledge skilfully, if he understands the principles of pedagogics, if he has come through the college with a correct idea not only of the subject, but the methods and principles of handling it, he is adjusting conditions and relations all the time; that is his function, peculiarly his function. Moreover there is this thought to be kept in mind, — by what process do these officers and these teachers with discretionary powers in the public school system come into their places? By chance, by personal interest, or by a system of careful selection and careful supervision? Do the teachers in the private schools everywhere come by a more careful process to their places? I do not disparage private schools; I rejoice in their good work, but let us see the facts as they are. Now, then, if my observation is correct, where is the difficulty that confronts us? Where is the essence of this evil of cramming, as you describe it? Where is it? Is it in the public school officer, or superintendent, or system, or teacher? I answer, no, it is in our present civilization. It is in the grasp of ideas that have such a hold upon us, that pushes us beyond our capacity and does not adjust the work to the life; the labor which destroys. Here was a case the other day: the daughter of a physician, in a private school, suddenly dropped out and brain disease occurred. She died. What was the difficulty? Not the studies, not the course of study, not the teacher, not the

lack of knowledge on the part of the father who was watching his daughter all the time, and who year after year, on account of his understanding of her physical condition, had taken her out of school certain periods to create relief,—not on account of this, but on account of the general idea taking so strong hold of all concerned that it was thought she must go on *this* year a little further with her studies, not hard studies or examinations, nothing of that kind, only just a little more than she could bear, and tuberculosis developed itself and she died. Now, these are facts. Let us then look at them as they are, and when we talk of cramming, charge its fault where it belongs.

## XIII.

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### EVENING SCHOOLS.

BY E. P. SEAVER, SUPERINTENDENT OF SCHOOLS, BOSTON.

SOME weeks ago a young graduate of a high school, wishing to continue one of his school studies by himself, came to me to borrow a text-book. Naturally, we fell to talking about his plans of study. His time for study is limited; for he works in the daytime, and can study only in the evening. His purpose is to prepare himself for college; and he hopes some time to enjoy the full benefit of a liberal education, and to enter well equipped upon a chosen profession. Some of the preparatory work he will do by himself; but for instruction in Latin and in Greek, in which the aid of good teachers is almost indispensable, he proposes to go, next winter, to the Evening High School in Boston. There he will find instruction in Latin, but probably not in Greek, the number of persons desiring to study Greek seldom being large enough to justify the formation of a class. However that may be, the school will afford him some assistance, and it might, under favorable circumstances, afford him all the assistance he needed.

This incident I have related in order to suggest one reason for providing public instruction in the evening to meet the wants of those who cannot take it in the daytime. A worthy youth, striving against the odds of

fortune to secure the advantages of a liberal education, naturally wins the sympathy and the respect. It is not difficult to procure any needed assistance for him. There are always benevolent wealthy persons who gladly loosen their purse-strings in his behalf. Nevertheless, it is not well that he should be regarded as an object of charity, not well that he should have cause to regard himself in that light. He should receive assistance only on the condition, expressed or implied, that a way be left open for him to discharge the attendant obligation.

Now, public instruction, free to all who choose to take it, has this advantage, that it is taken, not as a charity, but as a common right or benefit incident to citizenship. It may be enjoyed as the public streets and parks are enjoyed, equally by all men. It is like the protection to life, liberty, and property, the preservation of the public health, or any other benefit society undertakes to secure for itself through civil institutions. Nor are the benefits flowing from free public instruction all, or even chiefly, on the side of the individuals who receive it. The whole community is benefited. The State, as guardian of society, has a capital interest in the education of every citizen. Up to a certain age she compels attendance at school; beyond that age she invites attendance, and secures to all, by the laws, the right to receive higher instruction freely. To young men and women she says: My interest in your further advancement in knowledge and wisdom is great, not on your account alone, but because the power, the prosperity, and the safety of a free state are dependent directly upon the intelligence and the virtue of its citizens. I seek to place you under a certain obligation. If you



will give time and effort to the further cultivation of your faculties, I will give you free instruction. — the best that can be found, — and I will take you on as far as the means my tax-payers provide will allow. What I ask in return is that you clearly see why your being well educated is a matter of importance to me ; that you own your obligation ; and that you strive to discharge, wisely and justly, all the duties of a citizen.

The evening school, then, is to be advocated, not because it is a charitable institution supplying the educational wants of the unfavored by fortune, but for just the opposite reason, that it is not a charitable institution at all. It is simply an agency by which the State seeks to spread more widely among the people the opportunities for education. And the State is moved, not by a desire to benefit individuals, but by a purpose to secure the whole people in the enjoyment of free institutions.

“ Wisdom and knowledge, as well as virtue ” — so runs the Constitution of Massachusetts — “ diffused generally among the body of the people, being necessary for the perservation of their rights and liberties ; and as these depend on spreading the opportunities and advantages of education in various parts of the country, and among the different orders of the people, it shall be the duty of legislatures and magistrates in all future periods of this Commonwealth to cherish the interests of literature and the sciences, and all seminaries of them ; especially the University at Cambridge, public schools and grammar schools in the towns, etc.” (Const. Mass., Chap. V., Sect. 2.)

Thus broad is the constitutional warrant for the public policy of Massachusetts in respect to education. The fathers, in framing this Constitution, which has been the model for so many others, indulged in no narrow views as to the advantages of universal intelligence and the corresponding dangers of widespread ignorance.

They saw no limits beyond which the education of the individual ceased to be a matter of public interest. Their doctrine was a broad and democratic one; it amply sustains all subsequent legislation, however liberal. Whoever accepts this doctrine will ask for but one more argument to justify the existence of evening schools, and that is the argument from success. If these schools really do diffuse "wisdom and knowledge among the body of the people," if they reach many whom the day schools cannot reach, nothing more needs to be said, the demonstration is complete.

But the argument from success is essential. No amount of benefit theoretically aimed at can justify the waste attending practical failure. Practical success is the only argument that will silence the grumbling taxpayer, and the only result the friends of education should be satisfied with. What is practical success? What are its conditions? These are the questions that will be considered briefly in the remainder of this paper.

In the first place, let it be remarked that success is not proved by long lists of names on the register. The reported statistics often show the total number of names registered to be two or three times as great as the average number belonging, thus indicating that the duration of membership is only a fraction of the school term. In the most favorable instances the average duration of membership ranges from one half to two thirds of the school term. Again, the average attendance is found to be far below the average membership, usually as low as fifty or sixty per cent; in Boston fifty-four per cent, in London about fifty per cent. The best average attendance is found in the evening drawing schools, where

there is a definite course of instruction, and a definite object to be gained by completing it. Doubtless a high percentage of attendance, like that found in the best day schools, is not reasonably to be expected. Attendance is voluntary any way; and large allowance should be made for those whose attendance must be irregular at best. Still, there is ample room for improvement, and improvement is desirable.

One cause of brief membership and irregular attendance will be discovered in the character of some of the young people who resort to the evening schools, especially those of the elementary grade. It would help the practical side of the evening-school argument greatly if we always found the pupils to be in fact what we are prone to imagine them in theory, eager, ingenuous youth struggling in adverse circumstances to make up the deficiencies of their early education, and gladly accepting the aid of the schools in doing so. Truth, however, forces the confession that they are frequently found to be of quite the opposite character. Great, overgrown street boys — hoodlums — are found, who come, not to study, but to make a disturbance and “see the fun.” Their first enterprise is usually to try the teacher — to examine him, in other words — by a rude and primitive method of examination not unknown in the winter district schools of our ancestors, but now generally superseded by more rational methods. If the teacher meets the rude test victoriously, or if the police interfere, these uncivil spirits lose their simulated thirst for knowledge and desert the school. Then there is another class, not so bold as the first, but quite as full of nonsense. They may be tamed, but their interest in study is languid. The presence of such an element is usually indicated

by the fact that attendance on cold and stormy nights is larger than on mild and pleasant nights, when the attractions of the street prove stronger than those of the school-room. The first condition of a successful evening school is effectual control of these disturbing elements. What cannot be governed should be expelled; and if disturbance in the vicinity of the school-room results, the offenders should be taken care of by the police. There should be no mincing of the matter; vigor and promptness will make the remedy effectual. Let the character of the school for efficient discipline be established; let a wholesome respect for its authority prevail; and then, but not before, will the quiet, well-disposed pupils begin to receive benefit from the instruction.

There is little doubt but that this aspect of the evening-school problem has proved a troublesome one everywhere. The authorities in charge have sought in various ways to take security for regular attendance and proper deportment. One expedient has been to require a deposit of money as an earnest of good faith on the part of pupils entering the school. The wisdom of this expedient would, antecedently, seem to be very doubtful; and, so far as I am aware, results have never justified it. In a certain large city the truant officers in the day-school service were required to look up cases of absence in the evening schools. The unreason of this measure lay in the apparent attempt to enforce voluntary attendance. An excellent precaution is taken in another large city, where a written recommendation from the parent, guardian, or employer of the pupil is uniformly required. This has been found to afford a degree of security for regular attendance and proper

deportment, and the reason is obvious. The author of the recommendation owns a responsibility which may be appealed to in case of need.

The second condition of success in evening schools is good teaching. But why say this? Is there anybody who does not know it? I suppose not; and yet people often act as if they ignored it, or had forgotten it.

If we look into the matter closely we shall find, I think, that a part of the disorder, irregular attendance, and lack of interest we have just been considering comes, not from the incapacity of the teachers to govern, but from their limited capacity to teach. Their pupils find this out sometimes earlier than their employers do.

The teacher of an evening school has no easy task. He has widely various minds to deal with. Grouping the pupils by similarities of condition and needs, goes but little way to help him. To succeed in teaching such a heterogeneous company he needs more than ordinary skill, versatility, and good sense. The mere routine that day-school teachers sometimes fall into utterly breaks down here. And yet the appointing powers too often act as if inferior qualifications were good enough for teachers of evening schools. Teachers who have failed in the day schools, or who are thought to be unfit for appointment there, are allowed to try their hand at the no less delicate task of teaching evening-school pupils. A good deal of the work in evening schools is done by those who are not, and do not intend to become, teachers by profession. Their chief interest lies in some other profession; and they resort to teaching, for the time being, as a means of partial support. They may or may not be good teachers. If they are, well and good; if they are not, it is bad for the school,



however convenient the stipend may be to themselves. How to provide the evening-school service with a sufficient body of professionally trained teachers — able persons who have adopted teaching as their life-work — is yet one of the unsolved problems. In one large city we find teachers of the day schools employed; and the rule that no teacher shall be appointed in the evening schools who has not had at least three years' experience in the day schools; the object evidently being to secure a degree of professional skill in the evening-school service. In another large city the rule is that no teacher in the day schools shall be employed in the evening schools, the intention being to protect the day schools from the effects of overwork on the part of the teachers. The effect of this rule is to fill the evening schools partly with persons whose professional skill is not great, and partly with day-school teachers from adjoining towns, who must add to their other labor that of travelling back and forth. Neither of these rules is wholly satisfactory or free from practical difficulties. The true solution is probably somewhere between the two. It will perhaps consist in bringing the work of the evening schools into more intimate association with day-school work, treating both as equally worth doing in the best manner, and allowing the same teachers to engage in both, but under proper safeguards against overwork. The details of such an arrangement are not easy to suggest in a general form. Each city would have to work out its particular problem in the best way for itself. Meanwhile we may believe that the greater the desire to have the evening-school work well done, the better the chances that satisfactory solutions will be found in due time.

As a third condition of success may be mentioned suitable text-books, and good sense in the use of them. The need of attending to this condition may be illustrated by instances of neglect to heed it.

In one case pupils barely able to read an ordinary newspaper paragraph without spelling the words were found trying to read selections in the most advanced reading-books, — selections from abstract philosophical and critical essays utterly beyond their comprehension.

In another, pupils were rendering passages from great orators and poets in a painfully senseless and ridiculous manner, and the performance was called declamation.

Classes have been found spelling, orally, out of the time-honored spelling-book, long lists of words not one in ten of which they would ever use, or ever ought to use, when they should have been learning how to write common words and phrases correctly, how to compose a letter, and how to use a dictionary. Much good may be wrought by the application of a little common-sense to the selection and use of text-books.

As a fourth condition of success may be added suitable school-rooms. The estimate in which evening schools are held by the authorities has an important influence upon them; and this estimate is indicated plainly enough by the character of the accommodations chosen for them. Of course it may be admitted that elegant school-rooms, supplied with all the modern conveniences, are not absolutely essential to good instruction; for, given a company of persons eager to learn, and a live teacher to teach them, we may be very sure that good instruction will be given in an attic, in a stable, or in any other queer place. But when a city, possessing many clean, pleasant school-rooms, puts the

evening classes into unfurnished ward-rooms, old engine-houses, gloomy basements, and other dismal places, what wonder that the pupils feel the slight, or are moved to contempt and ridicule?

Very striking was the revolution wrought in the elementary evening schools of Boston by simply taking them out of their disagreeable quarters and placing them in the convenient and well-lighted day-school rooms. This simple step went far towards settling the difficulties of discipline. The influence of surroundings seemed to count for something. Big boys, who did not restrain their mischievous propensity to disorder in the ward-room or in the engine-house, appeared to respect a real school-room and to conduct themselves as be-seemed the place. And, then, the use of black-boards for illustration, the placing of the pupils at separate desks where they could write without disturbing one another, the use of pens and ink, — these and other conveniences available only in a regular school-room promoted great improvements in the instruction.

Finally, having the evening schools well housed, well provided with books and apparatus, placed in charge of able teachers, and brought under efficient discipline, we shall need one thing more to bring them to the highest degree of usefulness, and that is definite courses of study. This remark applies more particularly to the higher schools; for the sphere of the elementary schools is pretty well defined now.

The elementary schools are concerned with the mere rudiments of learning. They supply the wants of those boys and girls whose attendance in the day schools must be broken off at a very early age; and further they help to remove that blemish of adult illiteracy which

immigration brings upon us. So long as pupils learn merely reading, spelling, writing, and the simple rules of arithmetic, they should belong to the elementary schools; and a reasonable degree of proficiency in these branches might with good effect be attested by proper certificates.

The sphere of the evening high schools is broader and more varied. There should be, at the beginning, examinations for admission, designed to test the fitness of the candidates to enter upon the courses they wish to pursue; and the standard of admission should be carried up to the point of excluding from the higher school all candidates who would be better placed in the lower.

The courses of studies in the higher schools may be as numerous and as varied as intelligent public sentiment is willing to allow. We have seen that Massachusetts, for example, set no legal bounds to the ground which public instruction may occupy. Not only foreign languages, English literature, mathematics, book-keeping, and the sciences, but phonography, drawing, modelling, carving, and even the various handicrafts may all be admitted as fit subjects for public instruction. The principle seems to be that any science or art, a knowledge of which will benefit many persons, — make them more useful to themselves and to the community, — may properly be taught at the public expense, if the community so determines.

But whatever be the subjects allowed to be taught in evening schools, there should be a definite course of study marked out in each one. The instruction should be systematic, thorough, and progressive. Every encouragement should be held out to induce pupils to

persevere to the end. At the end there should be, for those who choose to submit to it, a test of their attainments, and the issue of certificates or diplomas declaring what course or courses of study have been creditably completed.

The only example among evening schools of a carefully drawn course of study, concluded by a thorough examination and the award of appropriate certificates, that now occurs to me, is found in the evening drawing schools. The success of these schools may, it is to be hoped, induce the managers of others to seek improvement by similar means.

It would be easy to extend this discussion of practical details to much greater length; but it is time to bring this paper to an end. In conclusion, let me express my belief that evening schools, especially those of the higher grade, and which offer instruction in specialties, are destined to play a more and more important part in our system of public instruction. As our population condenses itself more and more into cities, new educational wants will appear and make themselves felt. The best way of supplying these wants is the question each community has to consider. Some, disbelieving in education beyond the rudiments, would do nothing; others would invoke the aid of charity, seeing that many improvements in education have been promoted in that way; but others, more wisely as I believe, will offer public instruction, in different sorts of evening schools, as the best means that can be adopted, — best for the pupils, and best for the community.

With a strong public sentiment favoring a liberal educational policy, there can be no doubt that evening instruction will be extended and developed to a degree



we now hardly imagine. To cultivate a favorable public sentiment seems to me to be one great duty of the professional educationist.

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### DISCUSSION.

E. C. Carrigan, State Board of Education of Massachusetts : —

MR. CHAIRMAN, LADIES AND GENTLEMEN: I wish, sir, that in the earlier days of the American Institute you had been of the executive management, that the question which to-day, and for the first time, has found a place in the official programme of this association, might have then engaged the attention of the world educational, and the principles involved in this discussion have long since been accepted and settled. Had Mr. Seaver's admirable paper been presented half a century ago, our evening schools would have escaped their unfortunate association with charity and church, and, in common with day schools, would have been recognized as a part of the general scheme of public instruction. That the country has suffered much from neglect of this work by school officials and public indifference, every gentleman who has given the subject thought will admit. I fully agree with the general and generous sentiments of this paper and the author's conclusions; but he has not gone far enough. He has not been as severe as he might have been in his review of the causes which have misled the public of the real value and importance of evening schools. His inquiry, "Why have not evening schools been a success?" has troubled many a school-man, and I fear is not clearly understood by our school committees, if by the rank and file of the profession. The returns from a circular, inquiring into the condition of evening schools, recently issued by the Massachusetts State Board of Education, betray a woful neglect throughout the country of all departments of evening instruction. In many localities crowded with illiterates, and where day schools are lavishly supported, the question of how, when, where, and for whom evening classes should be maintained has never been discussed; while in other sections of the country, where failure

has followed an indifferent attempt at its work, there is little encouragement for the present or future. An examination of these reports, which come from cities and towns of ten thousand and more inhabitants, must lead the reader to the following conclusions. *First.* That evening schools in these cities are generally demanded, but have proven a failure in most cases, and in but few have ever justified the expenditure. *Second.* That their failure is justly attributable to a want of proper support, and the gross ignorance of organization, classification, and discipline. *Third.* That the public and not the pupil is at fault,—a conclusion clearly demonstrated wherever evening schools have been given advantages akin to day schools. The returns were sufficiently general and comprehensive to warrant these conclusions. What, then, shall we say as to the future? Shall we, or shall we not, properly maintain these schools? One thing, it seems to me, must, as a corollary, follow, either manage and master evening schools as well as day schools or not at all. But is there any field for these schools? Have they any mission in education? With six million and more illiterates in the United States, mainly massed in the South and the manufacturing centres of the North, it is evident that a great work must be done, and that, too, by evening schools. Let there be granted for Federal aid the millions called for by the Blair bill. Let the States be called upon to supplement this grant with liberally increased appropriations, and the work is but half done. The important question is still unanswered: the problem of converting illiterates to required intelligence for citizenship is yet unsolved. And you (Gen. Eaton), whom I, as one of the Massachusetts delegates to the National Educational Convention in Kentucky, heard in the discussion of the problem of Federal aid to common schools, will be called upon to formulate a plan of procedure, and submit to the States, as the expert educational supervisor of the country, the importance of providing for their illiterate wards in evening schools as liberally as they provide for the more favored attendants at day schools. Much has been done by your bureau in calling the attention of Congress and the country to the necessity of remedial legislation in the matter of illiteracy; but much more remains for you to do in determining the best method and means for the work. Evening schools, it is said, have proven a failure; and hence, as a medium for reducing illiteracy, they are of no importance. Where, then, will

you find your means? In half-time schools? But these also are marked failure. In Sunday schools, as in the older countries? But these are *quasi-charitable* institutions; private, not public; and as the eleemosynary character of evening schools in 1860 occasioned their death, will not the same reasoning apply here? Again, the United States is a country unlike the Swiss cantons, Austrian states, and French provinces; and, while public sentiment may favor the union of secular and Sunday schools for general educational work, with the multiplicity of denominations among the Protestants, and the great power of the Catholic Church, I question the results attained from Sunday schools as a purely mental educational means. It is perfectly immaterial how, when, where, and by whom this work is done; the great question is, how can it best be done? One may present one plan, another a different; but, of the various schemes discussed, you will pardon me if I reject all but evening schools, upon which I would have centred all the thought of our educational councils till something determinate is gained. Sunday schools in the spiritual have more work now than they can do well, and we should never burden them with secular duties, but rather encourage them to do more and better work in their present offices. Half-time schools may succeed for minors under our school age (fourteen); but for the illiterate minor and adult, upon whom depends the family support, these schools, without remedial legislation as to hours of employment, afford little relief. What, then, can be done? My answer is, that, from an experience of six years in evening-school service, elementary and high, these schools are our first, final, and only satisfactory source to which we must turn for results. But we are met now with the assertion that the results from this source have never been satisfactory, and hence cannot be depended upon. The attendance at evening schools, it is said, is most discouraging. For the sake of argument let us admit it, and ask the cause. Take away your truant officer from the day school and give to it the teachers and supplies entailed on the evening school, and what would be the record? Let school officials be indifferent to the standard of day schools, and public sentiment averse to their support, and how long would their present rank be maintained? Let us for a moment examine more closely the method of organizing evening schools, no later than 1879, the first year I entered this service, and contrast it with the

method of to-day. The ward-room then was considered the appropriate quarters for evening classes; four years later we find a convention of Massachusetts superintendents voting that no school building in the Commonwealth is too good for this work. What occasioned this change? The fact that evening-school pupils were found to be safe guardians of public property was made known, and public interest followed. The cheerless cellars and ill-lighted ward-rooms being succeeded by day-school accommodations, why not further advance? Why should we continue to impose upon this service the rejected and superannuated teachers of day schools, and then libel the pupils as to attendance? Why charge an admission fee, as practised in Worcester and Lawrence, and then insult the applicant with instruction from a dollar-and-a-quarter principal and his seventy-five-cent assistants? Why continue these schools as a depository for the condemned supplies of the day school, and expect regularity of attendance thereat? Let us look at the case fairly, and analyze impartially the evidence, and then return our verdict. Contrast the conditions of day and evening schools in your respective cities as to accommodations, teachers, and supplies, before your adverse judgment is formed. Let not condemnation precede comparison, as has been the practice in the premises of this case. If you raise the question discussed by the paper as to how we shall master these schools, let me refer you to the statute of Pennsylvania, enacted in 1872, as one of the sources. I will quote you a section: "The qualification of teachers for said (evening) schools should be the same as those for the teachers of the day schools of the Commonwealth, as already made and provided, or as may hereafter be made and provided by law." With this statute in force in every State wherein evening schools are needed, but little would be left for a discussion of this nature. This law further provides that on the petition of a dozen citizens, the school committee must establish evening schools, and if the authorities refuse, a writ of *mandamus* will issue, and the court will compel them to comply with the provisions of the statute. The Massachusetts law of 1883, which provides for the establishment of evening schools in all cities and towns of 10,000 and more inhabitants, though mandatory, is in a measure a dead letter, there being no penalty clause, as in the law of Pennsylvania. I drafted the bill, but was unable to make its provisions akin to the general school law of the State, and hence,

though an improvement on the permissive statute of 1857, it is practically inoperative where local public sentiment is adverse. But we are told that there is no necessity for legislation on this question; that the dear public will not interfere with evening schools more than with your day schools, but will maintain them wherever needed; and the results warrant the needed expenditure. Let us examine the force of this generality. The theory is beautiful, but fast fades before the facts. Take, for instance, Boston. For upwards of twenty years it maintained, with crowded attendance, an evening high school, which was a credit to the city and Commonwealth. Thousands of young men and women, boys and girls, supplemented their grammar-school course in its classes, or therein made their preparation for the regular collegiate work. No better, more earnest, faithful, ambitious pupils were ever enrolled. But the school committee, after long deliberation, decided to discontinue the work, and, by a vote of eighteen to six, made an end to this part of their public trust. And this was but five years ago, in 1880. But in its death there was given life to the entire system of evening schools, as it has since been clearly demonstrated. The public, once ignorant of the facts, were finally awakened to the truth; and thanks to the press of Boston, to Wendell Phillips, John Boyle O'Reilly, A. A. Miner, E. E. Hale, John D. Philbrick, P. A. Collins, and others; thanks to the two ladies, one a member of the State Board of Education, and the other the only one of her sex on the Boston school committee (I refer to Miss May and Miss Peabody), — a lease of life, which it is hoped the Legislature will make perpetual, was given this school, within whose walls there has since been assembled more than five thousand different members. Should I appear a trifle too earnest in its defence, do not charge it to any personal interest one, as head master, might naturally have, but rather to a desire, in common with the thousands who have been its beneficiaries, to see that the libel against its good name, past and present, is fairly met and answered. Though re-established, there was not wanting those who were zealous to defeat its purposes. I know you have not forgotten the libellous charges against this school when the High School building was sought for its accommodation. The proposition was considered the wildest and most illogical ever presented. It was eloquently argued — and that, too, by gentlemen of broad intelligence — that the beautiful building, which had cost Boston



upwards of a million, in a few years would be ruined, should the petition of the friends of the Evening High School be granted. The furniture, if given over to these pupils, would be early condemned, the interior and exterior of the edifice ruinously defaced, and the most general destruction of property, public and personal, would follow the organization of evening classes within these walls. Yes, those who, compelled to leave their unfinished grammar and high school work, to provide for the necessities of life, and who, after the hard toil of the day, asked to continue their instruction at night, were at once condemned by a coterie of theorists as undeserving public confidence, and were refused admission to the building erected for all the people and paid for by a public tax; and this in 1880. But while the opposition was influential, there was a justness in the cause and claims of these petitioners which drew to their defence, from the pen of Wendell Phillips, his inimitable sarcasm, that Boston had expended hundreds of thousands of dollars in building a schoolhouse, which had been found "too nice for use after sundown." Others of the people, like the then chairman of the Board of Aldermen, now Mayor O'Brien, with the alliance of the press, secular and religious, championed the cause of these pupils, and opened, to day and evening schools alike, the doors of this palace-like building. You ask for the record of deportment. Nothing gives me more pleasure than to here testify that, during the tenancy of these pupils, not one dollar of malicious damage has been charged to them, though five thousand and more have been enrolled during my service as principal and head master. Sitting in the desks of the day-school pupils, whose books and other effects are left exposed, no material annoyance to day pupils or masters has been experienced. If, indeed, any department of public instruction has ever been grossly misjudged and purposely maligned, it is our system of evening schools; and more especially, the Evening High School. In opposition to the plainest, simplest facts, have been voiced the most unconscionable falsehoods. The great principle of equal rights, equal privileges, before the law, was denied to these pupils; and no reason whatever was ever assigned. It was never, however, denied that those who attend evening high schools have a purpose; that many a boy of sixteen, though graduating from a grammar or high school, finds, in his twentieth year, that for the special aims of his life he has not made the requisite preparation

for success. He has studied many subjects, but not the all-important ones. If an accountant, he looks for improvement in penmanship, commercial arithmetic, and advanced book-keeping. As a correspondent or business or professional amanuensis, he is looking for instruction in phonography and composition. The avenues to success are open to him, but his special fitness for the required work disqualifies him or is not such as to warrant his entering the race for promotion. With the doors of the school open in the evening, the ambitious youth, after the routine of the day, flock to these classes; and instead of, as charged, giving their attention to the destruction of their surroundings, are found making most rapid progress in their chosen specialties. Unlike many day schools, the question of discipline in the Evening High School is never troublesome, as during a service of four years, and with a membership of some five thousand pupils of both sexes, I remember but one instance of expulsion, and not a half-dozen cases of misconduct. And when you reflect, this experience is but natural, as these young people attend for a purpose of peculiar interest to each, and of the highest importance to their calling and the public. No school has done, can do, nor will do more good in our large cities than a well-organized, rightly mastered, and generously maintained evening high school. This opinion I venture from the standpoint of a pupil in, and master of, the Boston Evening High School, and from my observation as a member of the Massachusetts Board of Education. The fact that private commercial colleges and schools in the cities are crowded with evening classes is conclusive evidence of one of two causes, — first, that preparation for business life is not done in our day schools; or the local demand for evening schools is not satisfied. But it is urged that the public is not bound to maintain both day and evening schools. Let us briefly examine this position. Those who have given this subject any thought whatever must admit that thousands of boys and girls, from various causes, are compelled to leave country and city schools at an early age. It has also been shown that not more than ten per cent of grammar-school graduates ever complete a high-school course! Then why, I ask, should the accident of time bar the ninety per cent from the advantages of higher education, especially while the public in day high schools liberally provides for the ten per cent, who, more fortunate than the ninety, are not necessitated to abandon study to

earn their daily bread? The reasoning is wrong, and I maintain that so long as the public provides higher education for the favored few by daylight, it should not forget the less favored many who seek education by gas-light. As my friend John D. Philbrick stated to me, high schools are the most democratic institutions in the State; but the most democratic of high schools is the evening high school. Never was uttered anything more true, and I am confident that we are fast approaching the millennium when the distinction between the day and evening high school will be one in name and time, and not as now in kind. In these schools specialties will be followed; and while, in the nature of things, the courses followed cannot be as general and extensive, the work done, if conducted by competent teachers, will be as thorough and satisfactory as in day schools. We are now asked as to teachers in these schools, viz., shall we employ day masters in evening service? If considered reasonably, the question presents no difficulty. My position was known when I asked the school committee of Boston to repeal their regulation which barred the day masters from evening-school work. The committee favored us, and no better service was ever done for evening schools than that act of the Boston school committee. With such men as Anderson, Gallagher, Eaton, Page, Seavey, Parker, and other masters in the day schools, in charge of our evening classes, what but the best results could you expect? Instead of wearying these masters, as many suppose, it is a refreshing relief from the monotony of day-school work, to stand before an inspiring class of enthusiastic evening students. I assert, emphatically, that if there is to be any difference in the teaching ability of day and evening schools, that the better talent should be reserved for those who, after a day of hard toil, are found at evening work.

In conclusion, as to the general subject, let me say that for the manufacturing centres elementary schools are needed to care for the illiterate employee, and in larger cities the evening high school for the advancement of the many who are seeking instruction to better qualify them for their special vocation. What is true of the evening high is equally so of the evening drawing or art school. In a measure it is the industrial side of education which higher evening schools are called upon to supplement. Theory may be allowable in day work, but in our evening schools everything must be practical and progressive. Do we need any additional legislation?

is now asked. That remedial legislation is imperative to meet the demands of the times is clearly apparent, and to this end the influence of this and all like associations should be enlisted. Especially is this important in our manufacturing States, wherein the mills are crowded with illiterate foreigners and their children. Until his Excellency Governor Benj. F. Butler had the courage to expose the illiteracy of the State, but little was known. The governor doubtlessly believed in the maxim that "the most important lessons a nation can learn from its own history are to be found in the exposure of its own errors." The kind of Mexican conceit in our school system, which has been too long the characteristic of some of our so-called Massachusetts educators, had so blinded them that they had forgotten the lessons of the census, which shows that in such towns as Chicopee, Spencer, Blackstone, Provincetown, and the like, one in six, seven, eight, and nine is unable to write his name; while in most of these localities nothing of material importance was done for the reduction of illiteracy. And for this Governor Butler was called to account, and his inaugural questioned. Yet, when it was shown to the Legislature that both the governor and his statistics were right, the Legislature promptly responded and enacted the evening-school law of 1883, changing the permissive act of 1857 to a mandatory statute; thus making in towns of ten thousand and more inhabitants evening schools a part of the public-school system of the State. While this advance was a most important one, we are still too weak to meet the enemy. We must be re-enforced by legislation which shall make compulsory the attendance of illiterate minors at evening schools. Let me not be misunderstood in this reference to Massachusetts illiteracy. From a careful analysis of the statistics, it is found that, excepting children too weak in mind or body to attend school, there is scarcely a native-born boy or girl in the Commonwealth unable to read and write. Being a manufacturing State, bounded by the sea on one side, and but a day's journey from the Dominion of Canada, we are at the mercy of the manufacturer, who encourages the cheap, foreign illiterate laborer, and never asks whether he can sign the pay-roll in person, by mark, or by special power of attorney. And with the illiterate parent comes a swarm of illiterate children, many of whom, though far from their teens, swear that they are beyond the school age of fourteen, and hence not within the control of our

school officials. To rebut the lying statement of the parent, as to the age of the child, is utterly impossible, since the baptismal record is in a foreign country, or more likely was never entered. With this state of things, I would ask, Is any community or Commonwealth responsible for its mass of foreign illiteracy? The community may not be, but the State is responsible, so far as its illiterate minors. How? I answer emphatically, in not extending the school age through minority. It has been urged that the State cannot compel attendance at school during minority. This is also an error. If the State can compel school attendance at fourteen, it can at fifteen, sixteen, and so through minority. This is too apparent for consideration, as the Legislature's power in such matters is plenary. Let, then, the State enact laws imposing a penalty of fifty dollars or more for the employment of an illiterate minor, and there will soon be an end to this annual influx of foreign illiterate children. But recently I was met with a statement from so-called high authority in education, that in Massachusetts illiteracy was on the decrease, and there was not need of further measures for its reduction. Let me call your attention, as I did his, to the last report (made to his Excellency Governor Robinson) of the chief of Massachusetts District Police, whose duty it is to examine the manufactories of the State relative to this question. In discussing other matters, he says:—

“The Commonwealth at this point interferes with individual preference or indifference, and wisely provides that a child under fourteen years of age who cannot read and write shall not be employed in any manufacturing, mechanical, or mercantile establishment while the public schools of the town or city where the child lives are in session. From personal observation, and from the reports of inspection officers, it is apparent that there had been considerable increase in the number of children unable to read and write, who, having reached the statutory limit of fourteen years, are sent to work in such establishments. The number of children employed in such factories alone, thus far visited since my last report, is 7,365, and these are provided with certificates as provided by law. The number of children between the ages of fourteen and sixteen years unable to read or write is 1,178. Thus it will be seen that a large number over the prescribed age are growing up in ignorance. When the males become of age, they will be denied the privileges of voters, because they will be unable



to comply with the requirements of the Constitution as to ability to read and write."

I now submit to any person this authority, and ask, in the face of the fact that, with 93,065 people in the State unable to read and write their names, if some immediate steps should not be taken to lessen this burden which the Commonwealth is carrying, while the public freely appropriate for universal education even to the university doors. I have already discussed this question at too great length, and I will close, hoping that what has already been said and done will be strengthened by your influence till illiteracy is made but a nominal fact or for discussion, and our towns and cities, wherever needed, shall maintain, with credit to themselves and the country, as good a system of schools by gas-light as they are maintaining, and will, it is hoped, maintain by daylight.

## XIV.

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### SHOULD GREEK BE WHOLLY OPTIONAL IN OUR COLLEGE COURSES?

BY NOAH PORTER, LL. D., PRESIDENT OF YALE COLLEGE.

THE question whether Greek should be wholly optional in a college curriculum implies that college education is a peculiar education, that it claims to be peculiar in certain particulars, and that it is justly so esteemed; that it is distinguished from a technological education, from a university education, from a high-school education, and from every other form of school education except itself. Sometimes this education is called liberal, not for any special liberality in the ordinary signification of the term which this course of study may claim for itself, but because it includes a wider curriculum of study, and carries the mind over a broader field of effort. It does not limit the student to a single science, to a single language, but it conducts him as well as it may over a wide circle of topics, and expects him to form some acquaintance with them all, in order that he may come forth with this widened culture to take his place among his fellow-men for usefulness and influence. Of course a liberal education, a college education, a university education, if it means anything, must take time for its realization. And it cannot be judged fairly unless this time is conceded for it. As things go in this country, and in all civilized countries,

we may say that this period ordinarily ends, and perhaps always should end, at the age of twenty or twenty-one, and begins, perhaps we may say, with the birth of the student, giving him, on such a theory, some twenty years in this wide and liberal culture. If this is so, or anything like it is true, we may not complain of the failure or of the partial failure of what is called *college* education if only six years or five years are allotted for its achievement; we may not judge the claims of this education or of its pretensions or its achievements except it be understood that time enough be allotted to those who expect to realize the best of its effects. I mention this fact in order that we may keep in mind that the topic is very limited in its applications, and perhaps but few persons are qualified to understand it in all its relations. And yet I hope that the importance of this education, and the importance of the study of the Greek language, may both be so presented as to commend the assent of those who hear. Of language in general let me then say that the education of the human being may almost be said to begin with the study of words and sentences. The infant begins to be educated intellectually when it begins to learn the meaning of words and is taught to use these words with propriety and with intelligence. Take a deaf-mute, without sign language, and place that infant by the side of another who can learn the meaning of words. See how this child, this infant, makes its progress, slow but certain from the beginning, and proceeds with accelerated steps; how the acquisition of the meaning of one word after another, with the power to use them intelligently, is the bright dawn of the new day of intellectual light, and how strikingly in contrast with the mute child that cannot hear, and

therefore cannot speak, and, therefore cannot understand, — it remains in almost complete intellectual stagnation, and so continues until half a score of years are finished, or there comes to it some messenger of mercy and of skill who can teach it language; and with language the beginnings, glimmerings of dawning thought are awakened. As it is in the beginning of intellectual activity, so is it with its progress to the end. As we study language, any language, as we master the meaning of words and know how to use words with intelligence, we make intellectual progress; we hold fast what we gain; we become more and more wide and self-confident in our culture; we gain all the progress in any direction which is worth speaking of simply by the medium of language. It signifies very little to say that in studying English or Latin or German or Greek we do not study facts but study words, when all we know about facts we put into words; when the more clearly we understand the import of words the more exact is our knowledge of things, and when all the knowledge which we gain is stored away in this living repository which every man creates for himself, and learns to use just as far as he can think at all. To separate language from thought, words from things, to set the one in contrast with the other, shows, it would seem, either deficient reflection or some obstinacy of theory.

The knowledge of facts has taught scientists, mechanics, engineers, and capitalists to bring the iron from Marquette, Missouri, and other quarters for the finest and best mixture, to the city of Cleveland, where the coal might be readily procured, to a port to which all these ores might be brought for smelting, and from which they could be distributed. Here we

have an example of what is called a knowledge of facts in their relations to one another. It happens that just now a maddened crowd is assembled at Cleveland day after day, and would tear down the work-houses of human industry and bring destruction into all that man cares for in civil society, moved by their mistaken theories in respect to another class of facts. They are misled by words; we say they do not understand propositions; error misleads them and threatens to carry them farther to evil. It is because they do not properly interpret the words which they use concerning the relations of capital to industry and its proper rewards, that the deep foundations of civil society seem to be heaving as in the throes of an earthquake, in the mixture and maze of the bewildering propositions that fire the hearts of men and perhaps fire the city in which they dwell. It is because men do not use words rightly, or see their meaning properly, that they are so often and so fatally misled. There cannot be a more striking and vivid illustration of the importance of the study of words than is furnished by such facts as these that are occurring every day among us. Words are living powers; language is a vital embodiment of spiritual thought as well as of physical truth, and the one is, at times, as important as the other.

This leads me to another point. If language is so important to culture, that is, the mastery and intelligent use of language, let me add that the most successful way of learning language is by means of another language than our mother tongue. In order to understand this truth we must distinguish the naive and unreflecting use of language which the infant attains, and in which it makes such rapid progress,



from the reflecting and intelligent study of language which goes on when the secondary process is employed upon language in what we call the study of its structure, and its grammar. In order to gain this knowledge the most efficiently and rapidly we must make use of one language to interpret another. Hence, in order to study English most successfully in all its relations, and to gain consummate power over it, both as an expression of thought and an instrument of influence, we must study it with reflection. This we can do best of all as we study it through the medium of another language. Let me refer you here to a fact familiar to you as recorded in the biography of Dr. Franklin. The good doctor tells us that he became aware early of the defects of his English style and undertook to correct these defects by comparing his achievements with the sentences and the style of Addison in the "Spectator." He noted his defects as well as he could, using this standard of comparison, and so faithfully as to attain extraordinary success. But suppose instead of using English, he had used the Latin language, and had early been put to the grammatical study of Latin, we say, fearlessly and confidently, that he would have achieved more complete success. He would then have been provided with a mirror by means of which he could judge of the defects of his grammar and of his style through the test of another language. He would have been forced to think of structure and of style with far greater efficiency and success. The example explains itself. I have no time to explain this illustration, which I leave to you to think over and judge of what it implies.

But at this point we are pressed with another question: If we must learn a language other than our own,

why not use a modern rather than an ancient language as a mirror by which we may test our defects, test and reform our thinking, and form and remodel our style? Why not study English directly, only with analysis and reflection? Is not the English language the finest of all languages, the most flexible, the most copious, the most spiritual, and, to us, the richest in all its associations? Why send your pupil to the Latin language or any modern language? Why not directly study English grammatically and rhetorically, and begin and end your studies there? I am not disposed at all to depreciate rhetorical or grammatical studies in the English language. All I have to say in answer to this perfectly reasonable question is, that experience shows that a language like the Latin, or some other language than our own, teaches us most efficiently to test our own, word by word, inflection by inflection, sentence by sentence, besides giving examples of grammatical correctness and rhetorical beauty which are the best standards to those who avail themselves of them.

But we have not answered the question: Why not use, if you must use another language than your own, the German language, so rich and spiritual as it is, so full of modern associations, and so instinct with modern life? Why not read Schiller, and Goethe, the greater than Schiller, and make these writers your companions day by day and night by night? This inquiry is reasonable; while I blame no man for asking it, or being dissatisfied with the first answer which I can give, yet the proper answer to give is this: That German, fine as it is in its articulations, rich as it is in its vocabulary, as near to home as it comes for us, is not so good as an ancient language for the

reason that its inflections are fewer and that with all the richness of its suggestive wealth it lacks that clear and unrefracted sunlight of thought and expression which we find in the ancient languages as contrasted with the finest of the modern.

Then comes another point to be considered, and that is that the ancient languages for the culture of mankind furnish us with a civilization and style of thinking, with methods of feeling, and, you may say, with an entire world of intellectual and emotional life which is in striking contrast with that which we know as modern. Now, if you say this is mysticism, I will try to translate into common prose, and do it thus: The boy who has studied enough of Latin to begin to spell out his briefest lessons in Cæsar's Commentaries can scarcely read five lines of his first lesson without being awakened to the discovery that he has been confronted with a new sort of people such as he has never dreamed of before; that their thoughts and feelings are unlike those he has known anything about. As that boy goes on from the beginnings or dawns of this first discovery until he becomes at home in his Virgil, or his Lucretius, his knowledge in this direction goes from strength to strength. He has been studying history all the time without knowing it, because he has been in continued contact with the sentiments and the descriptions of another sort of people from his own. That may justify, you may say, the study of Latin; but why study Greek? Or why not be content with Greek without the Latin? The answer to this question, which is equally reasonable with the other questions which have been supposed to be propounded, is that the Latins went to school to the Greeks and we

cannot err if we follow their example. They went to Athens as soon as they could, and sent all their boys to Athens as fast as they could. Moreover, the Latin in its thought and in its feeling, with all of its individual power and peculiar force, is, in a certain force, dependent on the Greek, and, in every sense, is the mediator between the English and the Greek in historic progress. This is all the answer which I need to give, only saying, in addition, that no man ever tried to study Greek and mastered it in any considerable measure without being satisfied that he gained more in reward than the labor has cost him of pain and sacrifice.

The conclusion to which I have led you somewhat rapidly is strengthened by the additional consideration that you cannot use the time which is proper and ordinarily allotted to a liberal education with anything besides which is so good as Greek. You cannot spend your time with the best advantage on the English language for the reasons that I have already suggested, and for the additional reasons that the curiosity of the student cannot be sustained by what we call the philological study of the English language, as such, with that interest and enthusiasm with which the study of an ancient, preëminently the Greek, language is certain to arouse and sustain.

But why not employ the time on the mathematics? The answer to that inquiry, which is equally natural, is simply this: That the time for the efficient and successful study of the mathematics does not come to boys and girls, as they ordinarily present themselves, until after the time has elapsed when the elements of Latin and Greek may be mastered. The premature study of the mathematics in algebra and

geometry is not serviceable to the mind. It should be delayed till the mathematical powers have been developed and can be exercised with energy and satisfaction. The time before this may be best employed in acquiring the elements of the classical tongues with the elements of one or two modern languages. The linguistic comes before the reflective period. The mastery of language, both modern and ancient, comes long before the mathematical sense, if I may so express myself, is developed. Let algebra and geometry, then, be deferred until the time for the successful and satisfactory pursuit of the reflective and intellectual studies is fully reached.

But why not study natural science? The whole world is now occupied with physical science. The inquirer and objector both shout in union, "The child cannot begin the study of nature too early nor continue it too long. The whole world is now ready to be interested with physics and chemistry, with all the varieties of what we call the physical agencies and their relations one to another. Give your son and your daughter the earliest interest in physics, and let them early become familiar with these new sciences which put such a new face on the universe of the present and on the universe of the past. Why not?" Why not? simply because the time to study physics reflectively, with its wondrous revelations, with its perplexing questions, with its magic and its mystery, — the time has not come until the power of discrimination and reflection is fully formed; and long before this has taken place the mastery of the ancient and modern languages can be achieved. Let natural history occupy the boy and the girl, but let natural science be delayed. Let botany and physiology be



mastered so far as either may be said to be a science of observation. Store the believing and gushing mind with facts, but do not, pray do not, perplex the childish and youthful simplicity of your son and daughter with those speculations that stagger the strongest thinkers and force them to grapple with either the new scepticisms or the new faiths which everywhere obtrude themselves in the form of physical science. First give them maturity of mind and the power to discriminate and comprehend. Meanwhile, while memory is active and imagination is fresh, while the hopes are full of confident delight for good in the future, delay these puzzling questions and these doubtful inquiries till the mind has been disciplined to grapple with them. Nothing can be more mistaken, it seems to me, than the indecent haste with which young persons nowadays are exercised in our higher schools with what should be called the great problems of physical science. While I would have them delight in natural history, and occupy their minds and imaginations with these inquiries and enjoy the results, I would keep back, until the proper time of reflection shall have come, those puzzling inquiries which demand maturity and the disciplined mind before they can be properly met and successfully mastered. But let them study history. Oh, yes, let them study history; and above all let them breathe the very atmosphere of ancient life by the study of classical literature. Let them study history, in its dates, its facts, and its pictures of the past; but, for the same reason that I would delay and defer the study of philosophical or metaphysical physics, I would keep them back from all these high-sounding words which we hear at every

corner about the science of history, the science of politics, the science of the state, and even the science of ethics and of religion.

This theory of a liberal education gives us time for the study of languages and the study of literature. After all, then, our one question comes to these separate inquiries: Is there time enough for the study of what may be called the ancient languages before the reflective period comes and the scientific spirit and capacity are developed? Is there time enough during this period to master the elements of the Greek language and of the Latin language with one or two modern languages, — I do not say for all, but for those persons who are so favored as to be allowed to appropriate to themselves the time and the leisure which are required for a finished education? I answer, there is; if the time be allotted in due proportion to the several studies which make up a curriculum such as we have conceived and such as can properly be called liberal.

In conclusion, let me call your attention to the wording of the topic, that is, whether Greek should be optional in the college course. The question concedes that possibly Greek might be required for admission to the college course; and simply proposes the inquiry whether it may not cease to be required when the college course begins. To this question I would say no, most emphatically, and for the reason that it is not worth while to study Greek at all unless you can study it with sufficient thoroughness to master the language so far as to read the easiest portion of its literature with a certain kind of satisfaction. To stop at the threshold of a college course when the student is just ready to enjoy and profit by the dead language which

he has thus painfully mastered would seem to be a wretched economy of time and of intellectual strength. By this supposition we have brought up the student to such a mastery of the language as to be able to begin to read Xenophon and Homer and Plato with a certain degree of pleasure and profit. To stop just at this time when he is ready to enter upon the fruits of his laborious toil is to throw away more than half of the advantage which promises to be derived from the acquisitions he has made.

But my time is exhausted. Let me conclude by saying simply one other thing: No man ever learned to read Homer and Plato and Xenophon with a certain degree, a reasonable degree of facility who regretted it; no man has ever been known — *no reasonable man, at least*, has ever been known — to regret the knowledge which he has gained and the impressions which he has received through this discipline of study and acquisition. I mean no man who, in any decent sense of the term, ever gained that knowledge of Greek literature which has enabled him to read, with the moderate help of a dictionary, the easier Greek writers, — no such person has ever been found who will not acknowledge that he has gained thereby one of the most valuable possessions of his life. On the other hand, multitudes of men have scolded and rebelled against their college teachers and disciplining officials for the earnestness with which they held them to their work in the study of the ancient languages, who, after leaving college, have both felt and expressed the profoundest gratitude to them, and to the colleges that insisted that they should study Greek after they had crossed their thresholds. As it has been in the past, so will it be in the future.

REPORT  
OF THE  
NECROLOGY COMMITTEE  
OF THE  
AMERICAN INSTITUTE OF INSTRUCTION,  
FOR 1885.

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As from year to year we meet to carry forward the good work of this association, we are reminded of the departure from earthly scenes of some who have, in past years, participated with us in the privileges and pleasures of these annual gatherings. While the number of deceased members is less than in some previous years, it forms a list of those who have been of the highest merit and who filled positions of great usefulness.

DANIEL C. BROWN.

On the third day of July, 1884, a few days before the opening session of this association, the city of Boston was called to suffer the loss of one of its most earnest, competent, and successful teachers in the death of Daniel C. Brown.

Mr. Brown was born in Kingston, N. H., on the 28th of October, 1814. After receiving such advantages as were afforded by the district schools of that day, he attended the academies at Exeter and Kingston, N. H., whose privileges he greatly prized and wisely improved. He subsequently studied medicine, but before entering upon its practice he decided to devote himself to teaching, and the success which uniformly attended his efforts in the schoolroom afforded ample proof of the wisdom of his choice. His first labors were in the common schools of his native town and in Sandown and Chester, N. H. Sub-

sequently he taught ten years in Arlington, Mass., after which he accepted a position in Boston, and remained in the city until the time of his death, highly appreciated as a faithful and efficient instructor, and greatly beloved by his pupils as well as by all his associates in the educational work. He taught six years in the Brimmer School and twenty-nine years in the Bowdoin School; in all, nearly fifty years of continuous and successful teaching, during which thousands of pupils were favored with the benefits of his instruction and profited by that personal and constant influence which emanates from the consistent and conscientious instructor, — an unconscious influence, it may have been, but one that makes itself felt throughout the lifetime of its recipients.

Many years before his death, Middlebury College, in recognition of his worth, conferred on him the honorary degree of A. M. As evidence that Mr. Brown was a man of more than ordinary merit, we will quote a few words from addresses made by those most familiar with the man and his work.

The Hon. J. D. Philbrick, who was for nearly twenty years superintendent of the schools of Boston, says: "I knew Mr. Brown from the time he received his appointment to the Brimmer School, and at once recognized his extraordinary qualifications as a teacher. With rare opportunities of forming a just estimate of his character and career, I take profound satisfaction in bearing testimony to the eminent ability, zeal, fidelity, and conscientious devotion with which he performed every function and discharged every duty devolved upon him. He was never found wanting. . . . Always at his post, always alert to ascertain his duty, and instant in the performance of it, in season and out of season, he had no part with pretenders, marplots, obstructionists, and drones. . . . I recognize in him the man of round-about common sense, of high moral principle, of dignified and courteous demeanor, and of eminent practical efficiency."

Joshua Bates, A. M., for many years the accomplished and efficient master of the Brimmer School, with whom, as usher and submaster, Mr. Brown was associated for six years, says of him: "A more genial and efficient associate in school work, a more conscientious and able teacher, never crossed the threshold of the Brimmer School. Ever prompt to duty, thorough in instruction, and discreet in discipline, he



assiduously studied not only to properly teach and educate all his pupils in practical and valuable knowledge, but also to give such a moral bearing to all instruction as would tend to form in them a strength of character that would make men pure in heart, efficient in business, well educated, virtuous citizens."

James F. Blackinton, for many years an honored and successful teacher in Boston, after an acquaintance with Mr. Brown covering a period of twenty-five years, says: "I have known him as an earnest, devoted teacher, thoroughly imbued with the true teacher's spirit. It needed but little acquaintance with him, one needed to hear him speak but a few times on the subject of education, or to visit his school, to be convinced that he was thoroughly in earnest, devoted to his work. He never shirked any duty, never shrunk from any labor connected with his school. Everywhere, early and late, he was at his post seeking the best interests of his pupils."

When such men as Wm. H. Wells, Geo. W. Neale, and Daniel C. Brown are called from earthly scenes and labors, though the cause of education suffers a severe loss, the blessed influence of their labors and their noble example will prove a perpetuating good in all coming time.

Joined the association in 1867.

#### GEO. WM. NEALE.

On the first day of our meeting a year ago one of our number was called from earthly scenes and a life of usefulness to a higher life. Geo. Wm. Neale was born at Kittery, Me., May 10, 1844, and died at the same place — his father's home — on the 7th of July, 1884.

His earliest school days were spent in the district school, but at a later period he was sent to Phillips Academy, at Exeter, where he pursued a preparatory course of study, and, at the age of seventeen years he entered Harvard College, from which he graduated at the age of twenty-one. After graduating he engaged in business in the city of New York, but not finding it congenial to his tastes, after two years, he left New York and accepted the principalship of the High School at Concord, Mass., where he remained for three years, when, Nov. 21, 1870, he was elected submaster of the Quincy School, in Boston. After eight years of acceptable service here, his worth was

properly acknowledged by his unanimous election to the mastership of the Bowditch School, for girls, in the same city. Two years later, on the death of Mr. Wood, principal of the Quincy School, Mr. Neale was made his successor, the school being one of the largest and most important in the city. Within a few years this school had suffered the loss of two principals,—the lamented Valentine and Wood,—and this third bereavement within so brief a period was a severe blow to this important school.

Mr. Neale evidently engaged in a work for which, both by education and tastes, he was peculiarly adapted, and in each of the responsible and honorable positions he was called to occupy, his services were in the highest degree satisfactory to committees and parents; while the hundreds of pupils who were favored with his influence and instruction will ever cherish his memory with profoundest gratitude.

Mr. Neale was a man of no ordinary type, but both by education and by a devotion to his chosen work he was fitted for the highest usefulness, and if "that life is long which answers life's great end," it may safely be said of Mr. Neale that he died full of years and usefulness.

In all the relations of life, and in every position he was called to occupy, he discharged incumbent duties in such a manner as to command the unqualified approval of all associated with him, or who were familiar with his work. In his death not only the school of which he was the honored head, the church of which he was a faithful officer, but the community in which he lived and the cause of education, in which he was a faithful and honored workman, have suffered a great and irreparable loss.

"We should count time by heart throbs. He most lives  
Who thinks most, feels the noblest, acts the best.  
And he whose heart beats quickest lives longest;  
Lives in one hour more than years do some  
Whose fat blood sleeps as it slips along their veins."

Joined in 1869.

#### WILLIAM HARVEY WELLS.

Of those who took an active and prominent part in educational work in the early part of the present century but few survive, and the

number is yearly diminishing. On the 21st of January of the present year, William H. Wells died in the city of Chicago, at the age of seventy-three years. For more than half a century he had been an active participant in educational work, in which he had rendered very great and valuable service.

Mr. Wells was born in Tolland, Conn., on the 27th of February, 1812. His earliest school privileges were those afforded by the district schools as they were at that time, and these were meagre indeed. He manifested at an early age a strong desire for acquiring knowledge, and made the most of the limited advantages within his reach. At the age of seventeen years he taught school and resolved that he would also continue his studies with reference to a collegiate course of instruction, and with this in view he attended an academy at Vernon, adjoining his native town, for two terms. Here he was indefatigable in his efforts and made remarkable progress, ever manifesting the greatest pleasure in the acquisition of knowledge.

Impaired health induced him to abandon all thought of a college course, and he subsequently resolved to pursue a more limited course of study and qualify himself for the work of teaching. For this purpose he went to Andover, Mass., that he might enjoy the advantages of a teacher's seminary, then under the management of the late Samuel R. Hall. This was a private school established by Mr. Hall, and was the first institution ever organized for the purpose of training its pupils for the special work of teaching in common or district schools. He spent eight months in this school, and his interest and progress were such that soon after he was invited to assist Mr. Hall in the work of instruction. He accepted the position, and for eleven years—from 1836 to 1847—he did excellent work in this school, gaining the highest esteem of his associates in teaching and of his pupils. While here he prepared a text-book in English Grammar for school use, which was received with much favor. It met with a large sale and is still extensively used. At about the same time, Dartmouth College honored him with the degree of A. M.

In 1847, Mr. Wells was elected to the mastership of the Putnam Free School, at Newburyport, Mass. This school was founded by the late Oliver Putnam, by whom it was liberally endowed. Here Mr. Wells labored to very great acceptance for six or seven years, gaining an enviable reputation as an accomplished instructor, and placing the

school on a good and sure basis. His enthusiastic manner and earnest devotion to his work awakened in his pupils an interest which has, to many of them, proved an animating and helpful power through subsequent years. His memory will long be most gratefully cherished by those who enjoyed his instruction and personal influence at the Putnam Free School.

In 1854, Mr. Wells was invited by the Massachusetts State Board of Education to take charge of the Normal School, at Westfield.

Here, as elsewhere, success attended his earnest efforts, but after two years he was invited to the superintendency of the schools of Chicago. He accepted the invitation, and for eight years he devoted himself to the improvement of the schools with the most flattering results. In 1864, much to the regret of all concerned, Mr. Wells felt compelled to resign the position on account of ill health, and thereafter, until his decease, he was engaged in other business, though he never ceased to manifest an interest in every movement in favor of improving the community and advancing the interests of popular education. On accepting his resignation of the office of Superintendent of the Schools of Chicago, the \* chairman of the Board of Education said of him: "His doings have been abundant and satisfactory, his success eminent and enviable." At a meeting of the Board at the time of his death, the following expression of feeling was made and adopted as the sense of the Committee: "It is not too much to say of Mr. Wells, that his work was the foundation of whatever is best and most permanent in our present educational system, and so well did he do his work that those who have followed him have found little else necessary than to build on the foundation which he laid."

On the day following his burial his pastor said of him: "For a quarter of a century he has been associated with every great interest of our city. He has given the culture and power of his thought to every cause which looked to the uplifting of the masses and the moral strength of our community, and his life has enriched every other life it touched."

Mr. Wells was often honored by his associates in educational work. He was President of the Essex County Teachers' Association, the

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\* Luther Haven.

Massachusetts Teachers' Association, and other organizations. He was author of an English Grammar, "Graded Schools," and a frequent contributor to educational papers and periodicals. His was an earnest Christian life whose end was peace.

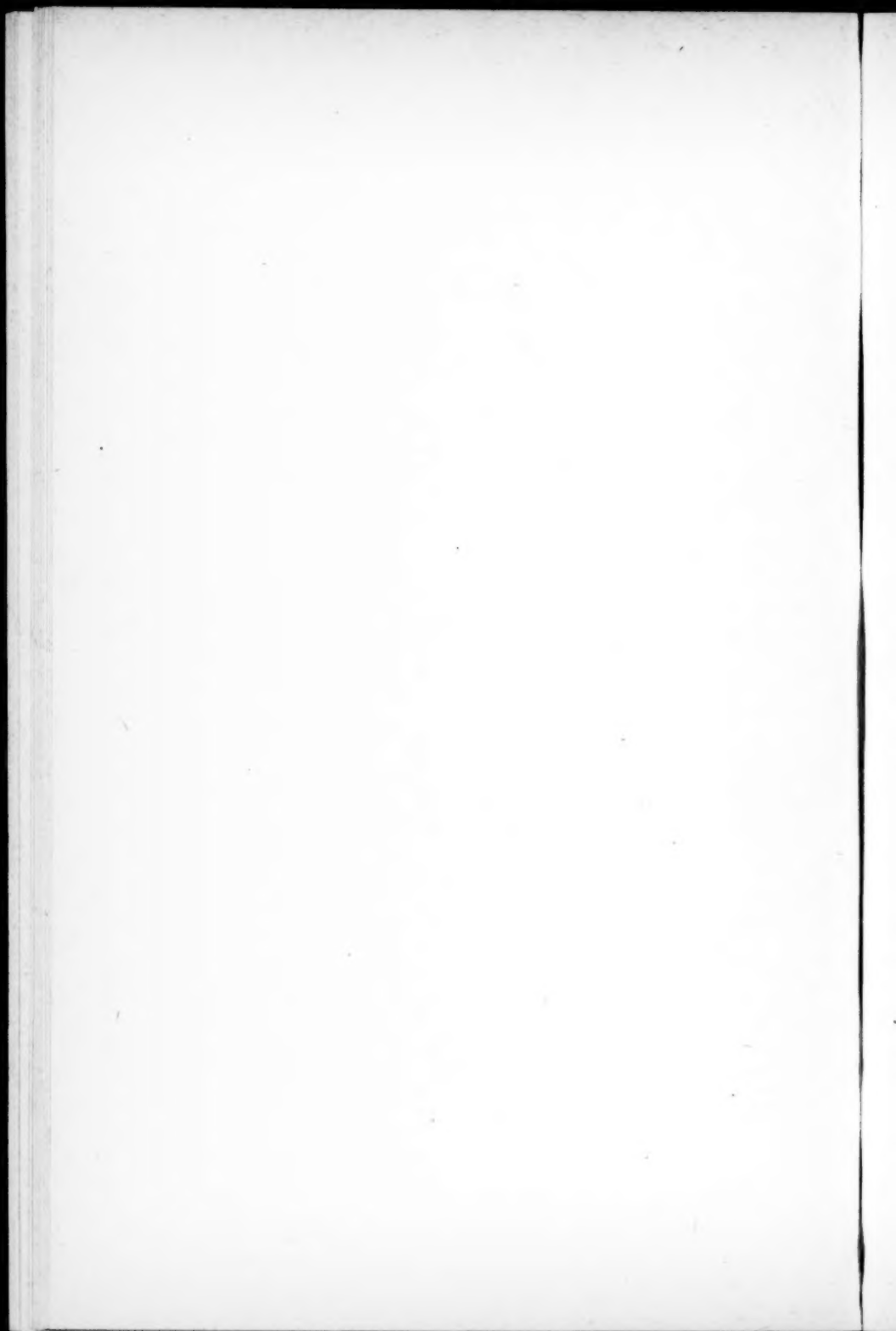
"The life above, when this is past,  
Is the ripe fruit of life below."

Joined in 1835.

CHAS. NORTHEND,  
W. H. WEBSTER,  
JUSTUS DARTT,

*Committee.*





**PRIZE ESSAY:**

AWARD OF THE AMERICAN INSTITUTE OF INSTRUCTION.

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WHAT IS THE TRUE FUNCTION  
OF A  
✓  
NORMAL SCHOOL?

✓  
BY GEN. T. J. MORGAN,

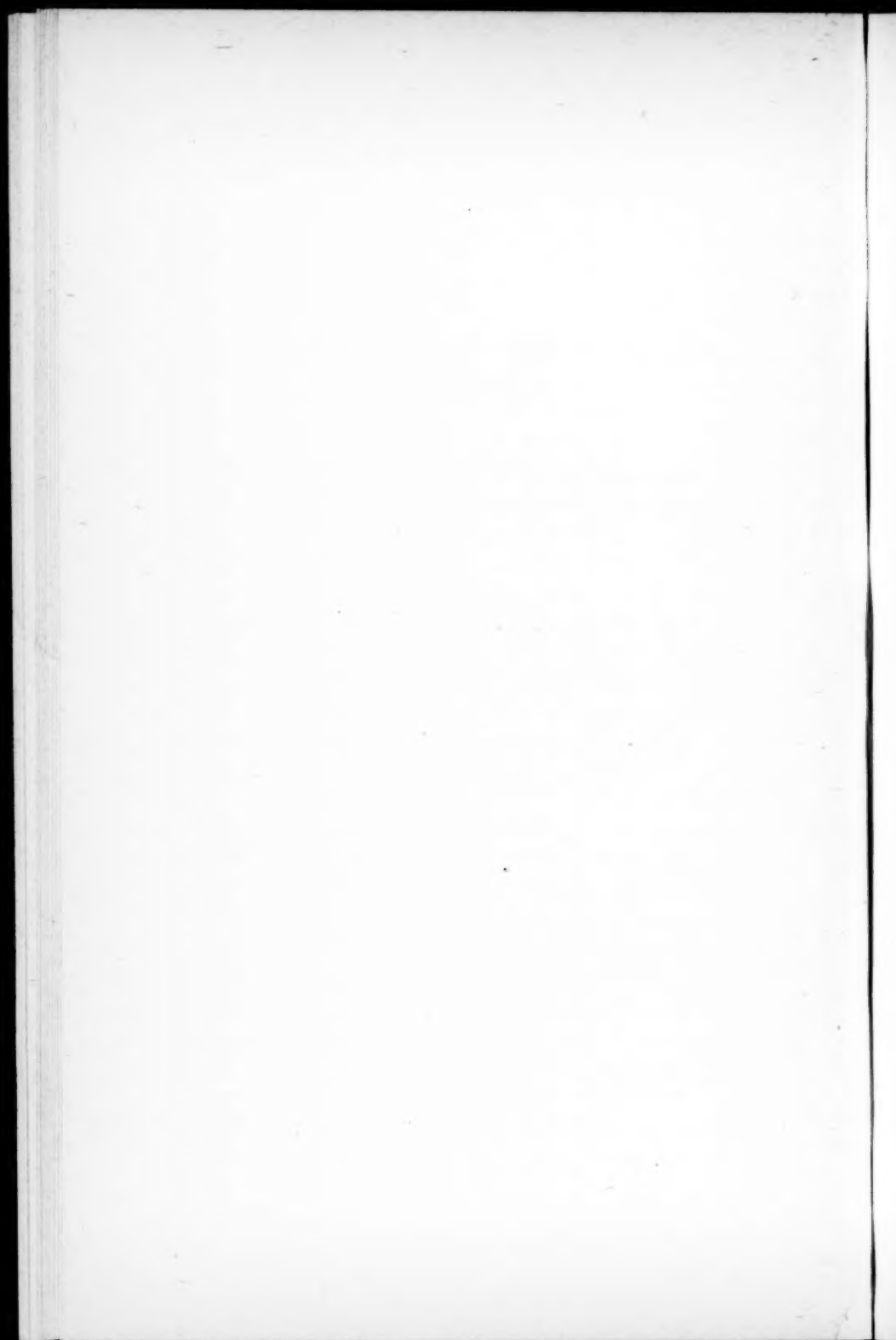
RHODE ISLAND STATE NORMAL SCHOOL, PROVIDENCE, R. I.

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## WHAT IS THE TRUE FUNCTION OF A NORMAL SCHOOL ?

BY THOMAS J. MORGAN.

In this paper the term "normal school" is used as a generic term, applicable to that class of schools in America in which teachers are trained. The specific work of any particular school must be determined by any peculiar circumstances that condition its activities. This discussion undertaken in this case is limited to American schools.

The plan of the essay is as follows : An introductory sketch is given of the *tout ensemble* of educational agencies, in order to bring into bold relief the work of the school teacher.

Next, with a view of showing the function of the normal school, an outline of study is given, a plan of a training school sketched, the special function of the school in relation to the profession is set forth, and some considerations are offered against the prevailing custom of doing so much academic work.

Owing to the peculiar structure of our government we have no national system of education, such as obtains in Prussia. Each State has its own system, and these are by no means alike. It is consequently impossible to speak of the American system of education except by way of accommodation, and then only in general terms.

## GENERAL SURVEY.

The active agencies at work to mould our national life by the instrumentality of teaching, and which are immediately affected by the normal school, are the following:—

1. The family. The child's first teacher is the mother; its first school, the nursery. The atmosphere of the home life is a most potent factor in moulding the child's character. All of our youth must graduate from the home into the school, where their career will be determined by the influence of the home.

2. The idea now widely obtains that it is necessary for every State to provide the rudiments of education for the whole body of children of school age. The Republic, because it is a republic, — a government of the people, and by the people, — must, as a matter of self-preservation, see to it that the essentials of good citizenship, intelligence, and civic virtue shall be universally diffused. To secure this the State establishes and maintains at public expense free schools, open to all. These schools comprise the district (chiefly ungraded), the primary, and the grammar schools. There are also many private schools of corresponding grades.

The two specific ends aimed at in the common school should be the awakening of the faculties, and the impartation of that knowledge that will be of the most practical utility. The pupils are to be trained for freedom and for usefulness. Every child is to become a producer, and not a pauper; a law-abiding citizen, and not a criminal; a respectable member of society, and not a tramp; an intelligent voter, and not a tool for demagogues; a patriot, and not a partisan.

There is a growing sentiment that the work of the common school should be made in the highest degree practical. It does not and cannot impart a liberal education. It aims at immediate practical results, rather than at culture. The mass of those who receive its benefits go no further in their studies, but enter at once upon life's duties, which means, in too many cases, a mere struggle for existence. There are many advocates of some sort of industrial training in connection with the public schools, to take the place, in some degree at least, of the old system of apprenticeship, which will give to the laboring classes something of skill, and so relieve their toil and break their bondage. Competition, which naturally increases with the growth of the population ; division of labor resulting from the growing complexity of our civilization, and the tyranny of trades unions dominated largely by foreigners, many of whom have had a technical education abroad, — would seem to necessitate some practical enlargement or addition to our present educational agencies for the masses.

It should not be forgotten, however, that the higher grades of schools, soon to be mentioned, are largely recruited from the district and grammar schools. The seeds of culture sown there are to reach their maturity in the university. The door of every country school-house should open towards the college.

The work of the common school is characterized by its elementary nature, its thoroughness, and practicalness. The administration of a firm and wise discipline, the inculcation of good principles, the formation of correct habits, the awakening of a lofty ideal of life and duty, and the development of a manly character, as well as the awakening of mind and the imparting of knowl-



edge, enter into the responsible duties of the common-school teacher. The far-reaching results that must flow from the common-school work lend to it great dignity and importance. The qualities requisite in a common-school teacher are good natural endowments, an established character, a mastery of the subjects to be taught, skill in governing, aptness in teaching.

3. Next above the schools just described are a group of those that may be called secondary. They are the high schools, academies, seminaries, and private fitting schools. Receiving its pupils from the grammar schools, the high school attempts to do a threefold work. First, to complete the task of fitting the student for the duties of life, by giving him an acquaintance with the elements of the natural sciences, especially in their relation to the arts and trades. Its mathematical drill extends to algebra, geometry, and surveying. Second, it seeks to impart something of liberality to the culture, by giving its students a knowledge of rhetoric, literature, history, English composition, etc. And, third, it seeks to give, to those who desire to pursue a college course, a preparation that will fit them to do so with ease and profit.

There are several open questions in relation to the high school; for example, How can the course be modified so as to meet the varying wants of the pupils? In some cases the high school already embraces at least three so-called departments: a boys' English department, a girls' English department, and a classical department. Should the industrial idea prevail, it may be forced to still further differentiate its work. Another question is in regard to the enlargement of the course, so as to enable those who cannot

pursue a college course to receive in the high school as near an equivalent therefor as possible. Still another of great moment is the adjustment of the high-school work to that of the college.

It is very evident that the requirements for those competent to fill chairs in these schools must increase more and more. Broader scholarship, riper experience, and greater weight of character must be combined with practical skill and knowledge of life.

4. The colleges constitute a third grade of schools. These embrace a wide range of diverse institutions, some founded and maintained by the State, others established by private munificence. Many of them are scarcely more than high schools, or academies; others — like Johns Hopkins — are universities.

The most marked feature in the present status of the older and stronger colleges is their development into universities, giving greater liberty of choice and larger range of studies. The methods of teaching are correspondingly changing. Original research, lecturing, and laboratory work are increasingly important.

5. Last of all, and completing the chain, are the various technical schools, each designed to train students to excel in some chosen calling or profession. The law, medical, and theological schools, the military and naval academies, the art schools and schools of technology, aim to give a minimum of general culture and a maximum of special instruction. The special fitness of a teacher for these schools is his grasp of the science and mastery of the technique or art of his calling.

## CONCLUSIONS FROM ABOVE SURVEY.

The most obvious suggestions arising from this hasty survey of our educational agencies are the following:—

1. Education is a very complex process, and involves the co-operation of very diverse agencies.

2. All these agencies—home, school, college, university—are parts of a great scheme, all working toward a common end,—to fit men and women for life in general, and the individual for his particular sphere. They constitute a solidarity, and what affects one affects all. They act and react upon each other.

3. There is a vast aggregate (say 300,000) of men and women who may be classed as public teachers,—those who give their time and energies wholly or chiefly to this work. With the enormous growth of our population, this number is steadily increasing.

4. There is a rapid increase in the proportion of female teachers. In a prominent Western city (small) almost every teacher is a woman. The great mass of normal-school pupils are women. In thousands of cases the only school training ever received is from women, and very frequently they themselves have never been taught by men.

5. The most momentous question which now confronts the American people is that of public education. All other considerations are subordinate to this. The nation is committing its very existence, as well as its highest weal, into the hands of its school teachers. These considerations lead naturally to the discussion of the question of the true function of the normal school.

The vast and increasing number of persons demanded as teachers in our public and private schools, and the wide influence exerted by them, call for careful consideration of the means for securing those best qualified for teaching. In the opinion of very many the normal school is the best agency yet devised for fitting teachers for their especial work. What, then, is the true function of the normal school? The general reply is at hand: the normal is a professional school whose distinctive work is to prepare men and women to teach.

#### COURSE OF PROFESSIONAL STUDY.

But the question demands a more specific answer, which will be furnished in part by outlining a course of study, which, subject to modifications, would best meet the wants of candidates for the profession of teaching.

*Anthropology.* The teacher's business is to care for, develop, train, and instruct children and youth. That which underlies all his work, and renders any intelligent performance of his duties possible, is a knowledge of the child-nature.

1. He needs to know physiology. Education necessarily has to do largely with the body. Not only is the ideal goal, *sana mens in sano corpore*, but all the processes of mental and moral culture are dependent upon physical conditions. The teacher needs a thorough knowledge of the structure of the body and of the laws of hygiene. The questions of ventilation, heat, exercise, overwork, recreation, are so vital that nothing save careful, special investigation of them, in their direct practical relation to school teaching, can insure even an ordinary regard for the pupils' physical well-being.

If any other considerations were needed to enforce this requirement, it may be found in the fact that many of the simplest laws of hygiene are constantly violated in schools of all grades, and that school-life, which should result in physical robustness, produces multitudes of physical wrecks.

2. The teacher needs to know psychology. The watch-maker must know the internal structure of the watch; the engineer, that of the engine. So the teacher needs to be especially versed in the mental constitution. Teaching, whether regarded as a process of drawing out the intellectual powers or as imparting knowledge, is conditioned upon the laws of mental growth and assimilation. No teaching can be successful that does not comply with these laws. There may be good teachers who have never made a formal study of psychology, apart from their observations upon their scholars and their unsystematic reflections upon the facts observed. A careful study of the science of the mind, before entering upon the work, would, however, have greatly facilitated it, saved them from mistakes, and spared their pupils the inconvenience, and oftentimes injury, of being experimented upon. The human mind has a very complex organization, and the laws of its development can be understood only by careful study. The special fitness of particular studies for the training of mental powers is apparent only by surveying the powers to be developed, in close connection with the studies designed to develop them.

The remedy for the one-sidedness of education, resulting from the too common method of cramming the memory, can only be found by such a study of the human mind as will bring into bold relief the various powers,—

perception, memory, imagination, the thinking and reasoning faculties, in their mutual relations.

3. The course should include a study of the ethical nature. The human being is capable of the most varied affections, appetites, desires, emotions, etc. He has a conscience and a will. His happiness and his usefulness depend upon the proper unfolding of these powers. He is to grow up, not to a life of selfish indulgence, but to be a member of a community, considerate of the rights of others. The teacher who would train this being for the proper performance of all his social duties, and the enjoyment of all his privileges, must make a careful study of the laws of his moral growth, strive to form correct habits, and to unfold a high order of moral character.

His study of ethics may include also an investigation into that body of accepted moral truth recognized by all as essential to the regulation of mutual intercourse in society.

The teacher is to influence his pupils chiefly by moral power, the plying of right motives. He will be greatly aided in this by a study of the child's heart, and an examination of the fundamental principles of right government.

4. This group of studies pertaining to man is not complete without logic. This is essentially psychological. The laws of right thinking are quite as important as the laws of right feeling. The highest outcome of intellectual education, on its practical side, is the power to think profoundly, and with ease and pleasure. To analyze, compare, reason, form just judgments, enter largely into the practical duties of life. There may be correct thinking without the study of formal logic, just



as there may be correct speaking without formal grammar, and elegant expression without rhetoric. But grammar and rhetoric are acknowledged to be in a high degree helpful, when properly studied, to a correct and elegant use of the mother-tongue. So logic, both as a science and an art, may be so taught as to greatly aid in securing skill in detecting fallacy and error, in investigating truth, and in properly arranging thoughts for the greatest effectiveness.

A special reason for teaching logic in normal schools is its relation to methods. The proper division, arrangement, classification, and presentation of a subject are simply so many forms of applied logic. The suitable teaching of every subject, the definitions in geography, the inductions in natural science, deductions in geometry, analyses of sentences in grammar, examination of literature, construction of essays, all depend upon a practical knowledge of correct thinking, or logic.

These anthropological studies that have been named as the basis of a normal-school curriculum might be supplemented in advanced courses by inquiries into ethnology and sociology, and whatever else would throw light upon man as an educable being. These studies pertaining to man are pursued in all colleges and many high schools. But instruction in them in the normal school should be thorough, comprehensive, and with constant reference to their pedagogical bearing.

If those who enter the normal school could be thoroughly well informed in the facts of physiology, psychology, ethics, and logic, as a condition of entrance, it would be all the better for them; the time could be spent in exhibiting the significance and use of those facts in the work of education.

## PEDAGOGY.

This group of studies should be followed by another, which may be termed pedagogical. This consists of :—

I. *An inquiry into the philosophy of education.* Education, considered as development, is simply evolution, or an unfolding to maturity of activity and strength of all the powers of the human being. It differs from evolution in matter, as in the tree or animal, in this : in man it is the result of conscious effort on the part of the individual. All psychological growth is conditioned upon exercise. All education, therefore, must be self-education. It is evolution from within. It is a process self-originated, self-directed, and terminates in self. The function of the teacher is chiefly that of supplying the external conditions for the maintenance of the native energies, the protection of them from unhealthy employment and dissipation, and the furnishing of the opportunities for their exercise.

The child's individuality and freedom should be sacredly respected. All educational processes are to be based on a careful study, not only of child-nature in general, but also of the idiosyncrasies of the individual pupil. Education seeks primarily the formation of right habits, — physical, mental, and moral. Its purpose is to put the child *en rapport* with his environment, nature, society, God. Every child is a man in miniature, a possible type of the race, capable under education of attaining an exalted degree of capacity for enjoyment, and power of performance. The ideal good in education is to put within the range of every individual, without regard to sex or social status, the attain-

ment of noblest possibilities. It is to enable each one to make the most of himself for time and for eternity.

The philosophy of education necessarily embraces such questions as physical training, college sports, and school amusements, the co-education of the sexes, industrial education, courses of study, and all other matters that pertain to the broad subject of the completest unfolding of man in his entirety, and his fullest equipment for duty and privilege here and hereafter. It sweeps the whole field of educational endeavor, public and private, in all its grades and stages; comprehends all its aims, means, motives, and agencies, and seeks to secure the highest results for all concerned.

II. *A history of education.* Much is to be learned as to both the philosophy of education and methods of teaching by studying the systems of education that have been formulated, the theories that have been promulgated, and the methods recommended and followed by those who have wrought on this great question in past ages. Nothing, perhaps, so liberalizes the mind of the teacher as the intelligent study of the words and ways of such men as Locke, Ascham, Rousseau, Comenius, Pestalozzi, Froebel, and Spencer.

III. *Didactics, or the principles of teaching.* There has come to be recognized a very considerable body of principles or first truths, regulative in their character, and very suggestive and helpful to the young pedagogue. To analyze these, discuss them, trace them in their origin and follow them to their practical issue, are a valuable exercise. Some of these aphorisms may be instanced:—

1. Exercise is the fundamental law of growth.
2. Each faculty must be exercised in accordance with its own laws of unfolding.
3. The chief aim of all primary teaching is mental development.
4. Nothing should be done for a child that he can be led to do for himself.
5. Interest on the part of the pupil is the *sine qua non* of all satisfactory progress.
6. There is a proper order for the development of the faculties, which in general statement is, first, the perceptive faculties, then the memory, power of language, imagination, and last of all, the reasoning powers.
7. The studies to be taught should be chosen with reference to especial ends.
8. They should be adapted to the age and attainments of the pupil.
9. In the early stages of a liberal education, the studies are chiefly disciplinary, and teachers should so use them. All should be so correlated, however, that one will lead naturally to another, and together form a system.
10. In the later stages of education, whether long or short, some reference should be had, in selecting the studies to be pursued, to the future occupation of the student.

IV. *Methodology.* Didactics has to do with training or development, while methodology investigates the laws of instruction, or impartation of knowledge. Didactics discusses the laws of growth; methodology, the laws of unfolding truth. Didactics has to do with mind; methodology, with matter. Didactics is concerned with

drawing out ; methodology, with putting in. They often run parallel, and are sometimes confounded, yet they are really distinct in their province of inquiry, separate in thought, and should be discussed apart. Methodology includes a discussion of isolated principles, or fundamental truths, and also of the systems founded upon them. Among the subjects treated under methodology may be mentioned, —

1. The kindergarten. This is really a system or method devised by Froebel to initiate in the mother's arms, and in the nursery, the work of child culture.

2. Objective teaching. The first stages of all education should be experimental. When the child has acquired the power of gaining knowledge readily and accurately without helps, then objects hinder instead of aid.

3. The topical method of presentation is to be followed as soon as the attainments of the pupil will justify it.

4. The art of questioning constitutes a very important element in all methods of instruction where recitation is used.

5. Analysis and synthesis, induction and deduction, the study of words and the study of things, thought and expression, knowing and doing, memory and reason, should as far as possible go hand in hand. They should never be violently severed.

6. The text (or reference) book and oral teaching should supplement each other.

7. For the higher grades of instruction the lecture system has special advantages.

8. Laboratories, apparatus, and illustrative museums are helpful in all stages of instruction.

9. The pupil is to be incited at every stage of his progress to independent research, observation, experiment, verification, thought, etc.

10. In general, we are to proceed from the concrete to the abstract, simple to complex, the part to the whole, and *vice versa*, and from known to unknown.

V. *Methods*. After this general survey of methodology, or rather in connection with it, instruction should be given in the method of teaching special subjects, such as form, color, size, weight, number, place, time, and language, to young children. Reading, writing, spelling, drawing, plants, and animals for those older. Arithmetic, grammar, rhetoric, geography, literature, history, the natural sciences, etc., for advanced grades.

While it may be that there is no one method to be followed in teaching any subject, every subject is best taught by a method, and he is most likely to find the best method who diligently and intelligently seeks for it.

VI. *School economy*. The student who has a clear idea of the nature of the being to be educated, and the character and method of the education, is prepared to consider the organization of the school, the making of a programme, the keeping of records, the administration of discipline, the legal rights and limitations of the teacher. For an advanced grade of students it would be proper to discuss the building and furnishing of schoolhouses; heating, lighting, and ventilating; duties of school officers, including superintendents; the grading of schools, school systems, etc. In short, whatever pertains to the administration of our complex school system would furnish suitable topics for this course.



Before leaving this branch of my theme, let me say that it would not be necessary, or even desirable, perhaps, that each class should pursue this entire course. It would be sufficient if the normal schools could give such instructions in the great fundamentals as would set students thinking, and so teach them that in all these questions they would be likely to reach right conclusions. Thus their influence could not fail to be profound, far-reaching, and healthful. It would eventually pervade the entire teaching force of the country.

It will thus be seen that great stress is laid upon the thought that one great function of the normal school is to formulate a body of educational doctrine. Perhaps nowhere more than in teaching is seen the power of truth. Any reform in educational ideas or methods becomes effective only when they become controlling forces in the teachers. At no time are teachers so impressible, so open to receive truth, as during that formative period of preparation when they give themselves up to be taught. When rightly taught as above, they will be aggressive, independent, and wisely conservative.

It is worthy of especial consideration that the problem of education, while old and involving invariable elements, is essentially a new problem, to be worked out by each new generation in its own way. On its practical side, education is the training of the individual for citizenship; that is, for the successful discharge of the particular duties of his special station in life. But a man's duties are determined by his environment; that is, by the demands of the ever-changing civilization amidst whose influences he lives and labors.

Educational doctrine must embrace not only the unchangeable element of man's nature, but also the

changeable elements of the life of which he makes a part, and normal schools must recognize these truths in their teaching.

## PRACTICE SCHOOLS.

Along with this professional instruction, the work of next highest importance to be done by the normal school is to train its pupils in the actual work of teaching. There is a science of teaching, and any person will be a better teacher if, before entering upon his work, he masters at least the rudiments of that science. The more familiar he is with these elements, the more easily can he apply them in his work in the school-room.

But teaching is no less an art, in which the highest success is attainable only through practice. Experience is the verifying process that must make evident to him the truth of his philosophy. Under a wise system of teaching under criticism, pupils may very greatly expedite the matter of acquiring both experience and skill. A student is better prepared for the independent work of the school-room by even a few weeks' preliminary handling of classes. As difficulties and perplexities occur, they are referred to the master for solution, mistakes are corrected, and excellences are acknowledged and commended. By this means, it should be noted that the schools would not only be saved in a measure from the blunders of inexperienced teachers, but, what is a matter of the highest importance, they would be permanently spared the infliction of those who by this testing process are found wanting in the essential elements of success as teachers, and are refused certificates, and advised to seek other callings.

How the normal school shall supply the need of training, and so fulfil this important function, is a mooted question. Several methods are followed. One is to allow the undergraduates or pupil-teachers to teach under the eye of a head teacher, who has the chief responsibility for the discipline and progress of the class. Another is to assign pupil-teachers to particular classes for definite periods of, say, ten weeks, and hold them responsible for arranging the work, instructing the classes, and maintaining discipline. Their work is frequently inspected by their appointed critics, and their failures and successes are pointed out. This system varies widely in some of its details. For example, in some schools no teaching is done until the pupil has finished his professional studies. In others the study of method and practice in teaching go together. Another method, wholly distinct from this, is to call upon the pupils, each in his turn, to teach his own class.

It is not my purpose here to criticise these various plans. It is sufficient to say that, in my judgment, formed after a somewhat varied experience and wide observation, a practice school is an essential factor in a complete normal school; that pupil-teachers derive an invaluable experience by teaching veritable children, and actually exercising authority for a continuous series of months; and that under proper supervision this can be done without detriment to the children.

#### THE MODEL SCHOOL.

A third great part of normal-school work is to embody and exhibit the highest type of a school. It should be a model school. The grounds, buildings, furnishings, apparatus, cabinets, libraries, the classification, instruc-

tion, and discipline, should be of the highest order. The faculty should represent the last best word in the educational world, be ever on the alert to catch the newest theory, and to adopt and hold fast that which is good. The school, in order that it may be a complete object-lesson, should embrace the kindergarten, the primary, intermediate, grammar, and high school grades. There are several reasons for such a school. First, it is a complement to the philosophic ideal, showing that what ought to be, may be. Second, it enables the pupil-teachers to become familiar, by actual participation in the daily life of such a school, with the best principles of government and methods of teaching. Third, such a school is an object-lesson of great value to the general public, putting before them in concrete and impressive form the new education.

## CHARACTER BUILDING.

The great fact should not be overlooked that the normal school is, first of all, a school, a seminary of learning not only, but a place for character building. It is so to train the pupils—the future teachers—as to repress the evil and foster the good in their lives; to form habits of system, punctuality, industry, self-control, independence, thoughtfulness, moral earnestness, etc., so that they shall be prepared to teach by example as well as by precept, by their lives as by their words.

The most forceful fact in the teacher's work is his personal character. What he is, what he loves, what his ideals are, what he thinks, by what motives he is governed, what company he keeps, what books he reads, even what his amusements are, all enter vitally into his

work as a fashioner of youthful minds and manners. The normal school, by wise methods, inculcates noble principles, holds up for imitation the best examples of the teacher, and strives to create in the minds of its pupils an ideal of the schoolmaster toward which they are ever to aim.

#### A PROFESSIONAL SPIRIT.

Even a cursory glance at the relation which teaching sustains to the well-being of humanity, and the progress of the race in all that is good in personal character, domestic and social life, art, science, industry, government, philosophy, and religion, shows that it ranks along with the highest of human callings. Luther said, "If I were not a preacher, I would be a teacher." Teaching should stand high among the professions. It should be rigorous in its exactions of the requirements of those who seek to enter it, lay special stress upon character, learning, and largeness of soul, and jealously exclude the unworthy and the incompetent. It should allure to its ranks the noblest spirits, by offering the best facilities for the prosecution of their chosen work, suitable recompense for faithful service, social recognition, and a reasonable certainty of fixed tenure of office, so long as the work is efficiently performed.

Normal schools, properly equipped and ably managed, having before them the one distinct object of training men and women for this high office, do, by their very existence, call attention to the difficulty, importance, and dignity of the profession. By the philosophy which they teach, the methods they pursue, the standard of requirement for admission, the elimination of the incompetent, the dismissal of the unworthy, and especially

by constantly adding to the number of those thoroughly fitted for good service, the normal school awakens a professional spirit — a philosophic, philanthropic, patriotic spirit — in those who give themselves to this high calling, not as a means of livelihood, a *dernier resort*, but as to a noble life work, to which they may worthily devote all their energies and attainments.

#### THE PROCESS OF EDUCATION IDENTICAL.

Much mischief has resulted from violently separating education into distinct stages. The process of education is an identical one, the same throughout all its progress from the cradle to the college. It is the same mind taking its initiative lessons as it learns to recognize its mother's smile, which later pursues its investigations by peering into the heavens through the telescope, deciphers monumental inscriptions, or searches into the deep things of religion. The same laws govern its growth and acquisitions throughout. Philosophy of education embraces the whole scheme of psychical evolution, and recognizes it as subject to the same general laws of didactics and methodology. Formerly it seemed to be thought that any one could teach children, and that without special preparation. Now the drift of public sentiment seems to be that only primary teachers need a professional training.

#### PROFESSIONAL TRAINING FOR ALL TEACHERS.

The truth seems to be that, in order to attain the highest results, all who teach, whether in the home, the school, or the college, need a special training for the work.



The lecturer in the university, the professor in the college, the teacher in the high school, no less than the grammar master, the primary instructor, and the kindergartner, require not simply culture, education, but pedagogical training.

A very important part of the normal-school work is to train men and women for all grades of school teaching, especially the higher grades. Any one at all familiar with the work of high schools knows that much of the teaching in them is very faulty. Worse teaching than is done in some of the high schools and academies is, perhaps, nowhere to be found, unless it be in some of the colleges. Many a college graduate goes haltingly through life, simply because his instructors were ignorant, or negligent of their work as teachers. Normal-school training that would serve to improve the work done in many of the colleges would be a national benefit. Besides this, the universities and colleges are the centres of thought, and the educational ideas and methods that obtain in them will be dominant over all those who come under their influence. If those who are to teach there could have a special pedagogical training for their work, the influence of both their example and precept would be immediate and profound in developing a professional spirit. The young men aspiring to positions as teachers in high schools, academies, normal and grammar schools, — all of whom should be college bred, — would be influenced to seek a normal training. The mass of teachers for country schools must come from secondary schools. If these were taught by professional teachers, we should at once have a class of men and women imbued with a professional spirit. The influence of college and high

school would thus be enlisted on the side of normal schools, instead of being indifferent or hostile.

West Point trains men not simply to act as second lieutenants or captains of companies, but also as colonels of regiments, brigade, division, and corps commanders, and as generals-in-chief to command the armies of the United States. Grant, Sherman, Sheridan, Hancock, Meade, McClellan, Thomas, were all trained in the military academy, and the history of their achievements vindicates the policy of the government. The normal school, as a professional school, should do for the teaching profession what West Point has done for the profession of arms.

The theological seminaries do not spend their strength in fitting men simply to be pastors of feeble country churches. They strive to give such a training as will fit them for the most difficult posts, where the severest demands will be made. Natural selection and the survival of the fittest do the rest. The strongest and ablest go to the front, the weaker fill the easier positions. Andover, Union, Princeton, and similar schools strive to furnish leaders, and thus to lift up the whole body of the profession. The high places demand men of professional training. The example is contagious, and few country churches are now satisfied with an untrained pastor. The theological schools begin at the top, and so reach the mass.

The normal school, as at present organized, is not doing that work. Practically it sets itself to the task of training men and women — chiefly women — for primary and grammar school work, and teaching in the rural districts. By arranging its course of study, and lowering its standard of admission to accommodate

those who seek to fit themselves for teachers in lower-grade schools, it practically shuts out those who have had a university course and who aspire to teach. Few of the teachers in university or high schools have ever had a professional preparation for their work, or have ever seriously thought of having such. So long as the highest places in the profession of teaching are open to, and filled by, unprofessional men, the profession itself must suffer from the lack in professional skill of those who have knowledge and culture, but lack ability to train and impart.

The normal schools in America are doing a good work, and have helped to bring about a condition of things and a state of public sentiment which is already calling for something better. The establishment of chairs of pedagogy in colleges is in response to this sentiment. The point insisted upon here is that the time has come for the establishment here and there of normal schools of high grade, designed expressly and exclusively to give a strictly professional training to college graduates and others possessed of a liberal education, to fit them for the best work in teaching in high schools, academies, normal schools, colleges, and universities.

Undoubtedly, one function of the normal school is to train teachers for the country schools and the lower grades of city schools; but what is here insisted on is that this is not its only or its chief work. There is the same need of professional training for teachers for the higher grades as for the lower. The conditions of teaching in the country districts are such that there is little inducement for those who have a normal training to remain there permanently. If they aspire to teach

in the city, they at once come into rivalry with graduates of college and high school, who, though without professional training, have the advantage of broader culture and of local influence.

In so far as normal graduates who have had only a grammar-school training before entering the normal are employed as head masters in grammar schools, teachers in high schools, professors in normal schools, to the exclusion of college-bred men and women, it may well be questioned whether more harm than good may not ultimately result. Technical training cannot take the place of scholarship. Breadth is indispensable to the highest culture, and should be required of every teacher of high grade. The normal school is not to displace the college and the high school, nor to rival them, but to supplement their work; not to substitute technical training for scholarship, but to add to culture the best professional training.

## ACADEMIC WORK.

A large part of the strength of normal schools is spent in giving their pupils the rudiments of the common-school studies. They do academic instead of professional work. Against this policy it may be urged that it is a waste of resources. The normal-school faculties are required to do what the faculties in the high school should do. It creates rivalry and jealousy between the normal and high schools. It degrades the normal from a professional to a secondary school, thus helping to defeat its own ends, — the creating of a professional spirit. It fatally lowers the standard of attainment that should be required of every teacher. It overcrowds the course of study, and, by attempting to

teach both matter and method, does neither with thoroughness. It attempts the impossible. Students need more culture and discipline than are now required upon entering normal schools, and the separation of matter and method before they can fully grasp the significance of methodology.

A complete separation of matter and method, a thorough differentiation of the normal school into that of a strictly professional school, would, it is believed, be productive of the following results: The normal schools would at once take higher rank and compel greater respect. The ranks of college and high-school teachers and grammar masters would be more largely recruited from the normal graduates. The professional work would be better done. Normal-school teachers would turn their energies toward producing pedagogical literature rather than school books. Normal students would go out with more clearly defined notions of what constitutes professional training than they now possess. The antagonism between high school and normal school would at once cease.

It is worthy of note that, in the early educational history of this country, the great institutions of learning were designed as theological schools, and their work was miscellaneous and elementary. By a natural process of evolution and differentiation, the academy, the college, and the university have grown out of the divinity school. The divinity school proper, now leaving to those the work of general culture, seeks to do strictly professional, post-graduate work.

The normal school is undergoing something of the same healthy metamorphosis. The improvement and multiplication of the schools of all grades, where those

who wish to teach can receive the requisite instruction in the subjects to be taught, and the growing public sentiment, or rather demand, for a higher order of professional training, unite in rendering it possible and desirable for the normal school to do distinctively and exclusively professional work.

## CONSERVATIVE CHANGES.

Of course no radical revolutionary change should be suddenly introduced. That here suggested should be gradual. One such school might be enough to start with. It would be soon followed by others.

For the present, under the traditions of the normal schools, and with public sentiment as it now is, they will be obliged to do academic work. But it should be done under protest, and with a constant aim at realizing the true ideal of the normal school as an institution of high order, graded to meet the necessities of persons of varied ability, taste, and destiny, admitting only those whose scholastic attainments warrant it, and giving to them the broadest and most thorough professional culture possible, and so recruiting all grades of the profession of teaching with those who will give it dignity, and do for the public the best kind of work.

It is absolutely necessary that those who teach should be well grounded in the studies required in the schools in which they teach; and if those who enter the normal school are found deficient in these studies, it will be necessary, for some time to come, as it has been in the past, to provide some means for a thorough review. Where there is a well-organized practice school, the academic work can be done there. In some cases a



preparatory department may be maintained; in others the normal faculty must do this work. But so far as possible it should be separate from the professional work, and should be distinctively and professedly academic, with stress laid upon the fact that the work is extra normal and temporary.

#### SUMMARY.

To sum up, the normal school is a professional school, and ranks with the theological seminary, law school, medical school, and military academy. Its place is that of a post-graduate school. Admission should be limited to those who have completed their academic or scholastic work. Its spirit, methods, equipment, and teaching force should be of the highest order. Its instruction should be confined to those subjects which sustain the most intimate relation to the peculiar work of the teacher. Its great function is to add constantly to the number of those who dedicate themselves to teaching as a life work, and who seek to become, by personal character, scholarship, and pedagogical skill, able to do the best kind of work in whatever sphere of teaching they enter, whether in the kindergarten, the grammar, high school, college, or professional school. It should seek, by concentration of energy upon strictly professional work, to touch the profession at every point, and vitalize and ennoble it in every part.

